THE ADMINISTRATION

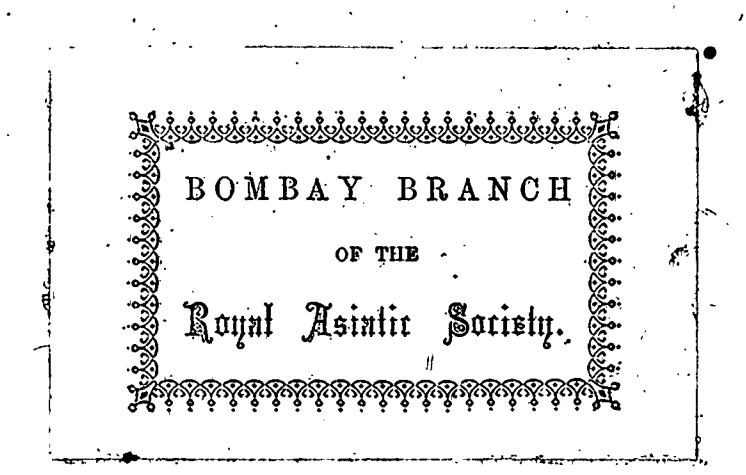
OF THE

LOWER PROVINCES OF BENGAL

DURING THE

LIEUT.-GOVERNORSHIP OF SIR JOHN WOODBURN, K.C.S.I.

00132938



Digitized with financial assistance from

Government of Maharashtra

on 01 February, 2020

VII

1-2-3

FORWARDED BY OFFICER OF THE LIEUTENANT GOVERNOR
8 AUG 1903

THE ADMINISTRATION

OF THE

LOWER PROVINCES OF BENGAL

DURING THE

LIEUT.-GOVERNORSHIP OF SIR JOHN WOODBURN, K.C.S.I.

Being a Supplement to
The Annual General Administration Report for 1901-1902.

132938
Ac

COMPILED BY

S. R. HIGNELL, Esq.,

BENGAL CIVIL SERVICE, ON SPECIAL DUTY.

LIBR. OF TH BOMB BRANC OF THE ROYAL ASIATIC

00132938

6 1 2

Calcutta:
PRINTED AT THE BENGAL SECRETARIAT PRESS.
1903.

[*Price—Indian, Rs. 2; English, 3s.*]

Published at the BENGAL SECRETARIAT BOOK DEPÔT,
Writers' Buildings, Calcutta.

OFFICIAL AGENTS.

In India—

MESSRS. THACKER, SPINK & Co., Calcutta and Simla.
MESSRS. NEWMAN & Co., Calcutta.
MESSRS. HIGGINBOTHAM & Co., Madras.
MESSRS. THACKER & Co., LD., Bombay.
MESSRS. A. J. COMBRIDGE & Co., Bombay.
THE SUPERINTENDENT, AMERICAN BAPTIST MISSION PRESS, Rangoon.
MRS. RADHABAI ATMARAM SAGOON, Bombay.
MESSRS. R. CAMBRAY & Co., Calcutta.
MESSRS. S. K. LAHIRI & Co., Printers and Book-sellers, College Street, Calcutta.
RAI SAHIB M. GULAB SINGH & SONS, Proprietors of the Mufid-i-am Press, Lahore, Punjab.
MESSRS. V. KALYANARAMA IYER & Co., Book-sellers, &c., Madras.
MESSRS. D. B. TARAPOREVALA, SONS & Co., Book-sellers, Bombay.
MESSRS. G. A. NATESON & Co., Madras.
MESSRS. A. W. HAMILTON & Co., 11 Edmondstone Road, Allahabad.
MR. N. P. MATHUR, Superintendent, Nazair Kanum Hind Press, Allahabad.

In England—

MR. E. A. ARNOLD, 37 Bedford Street, Strand, London.
MESSRS. CONSTABLE & Co., 2 Whitehall Gardens, London.
MESSRS. SAMPSON, LOW, MARSTON & Co., St. Dunstan's House, Fetter Lane, London.
MESSRS. LUZAC & Co., 46 Great Russell Street, London.
MESSRS. KEGAN, PAUL, TRENCH, TRÜBNER & Co., Charing Cross Road, London.
MR. B. ALFRED QUARITCH, 15 Piccadilly, London.
MESSRS. P. S. KING & SON, 2 & 4 Great Smith Street, Westminster, London.
MESSRS. H. S. KING & Co., 65 Cornhill, London.
MESSRS. WILLIAMS AND NORGATE, Oxford.
MESSRS. DEIGHTON, BELL & Co., Cambridge

On the Continent—

MESSRS. R. FRIEDLÄNDER & SOHN, Berlin, N. W., Carlstrasse. 11.
MR. OTTO HARRASSOWITZ, Leipzig.
MR. KARL HIERSEMANN, Leipzig.
MR. ERNEST LEROUX, 28 Rue Bonaparte, Paris.
MR. MARTINUS NIJHOFF, The Hague.

CONTENTS.

	Page.
Changes in the Administration	1
Political	3
Surveys and Settlements	4
Land Records	6
Government, and Wards and Attached Estates ...	6
Land Revenue Administration—Revenue and rent-paying classes	7
Legislation	7
Police	8
Administration of Justice	10
Jails	12
Registration	13
Municipal Administration and Local Self-Government ...	13
Volunteering	15
Marine	16
Weather and Crops—Condition of the people ...	18
Agriculture, Sericulture and Horticulture	19
Veterinary	21
Forests	21
Manufactures and Mines	22
Trade	25
Public Works Department—Roads and Buildings ...	27
Railways and Tramways	30
Irrigation	32
Finance	33
Customs	35
Opium	35
Salt	37
Excise	38
Stamps	40
Income-tax	41
Road and Public Works Cesses	41
Vital Statistics	41
Plague	42
Emigration and Immigration	44
Medical Service	47
Sanitation	48
Vaccination	49
Education	49
Reformatory Schools	52
Archæology	52
Census	52
Conclusion	57

THE ADMINISTRATION OF BENGAL

DURING THE

LIEUT.-GOVERNORSHIP OF SIR JOHN WOODBURN, K.C.S.I.,

7th April 1898 to 21st November 1902.

1. In the pages that follow a brief account is given of the administration of Bengal under the late Lieutenant-Governor, Sir John Woodburn, K.C.S.I., who assumed charge of the Province on the 7th April 1898 and died at Belvedere on the 21st November 1902. The order in which the various branches of administration are reviewed is, with few deviations, that prescribed for the Annual General Administration Report of the Province.

CHANGES IN THE ADMINISTRATION.

2. The changes occurring in the system of administration during Sir John Woodburn's Lieutenant-Governorship were with two exceptions neither numerous nor very important: these exceptions comprised the changes in the constitution of the Calcutta Municipality, which though carried to completion in the period under review were initiated by his predecessor, Sir Alexander Mackenzie, and the wide reaching changes made in the law affecting Inland Emigration by Act VI of 1901, which will be found described under "Emigration and Immigration."

3. The most important event under this head during 1898 was the re-organisation of the Subordinate Educational Service, which took effect from the 1st October. This service, as originally constituted, consisted of seven classes, the minimum and maximum pay of which were Rs. 50—5—75 and Rs. 400—20—500, repectively and in it had been included Assistant Inspectors of Schools, Professors of Colleges, Head Masters of Collegiate Schools, and other officers of similar rank. At the time however of the reconstitution of the Provincial Educational Service in 1896, it was decided that the distinction between this and the Subordinate Educational Service, which had been hitherto based on pay only, should for the future also depend on the duties to be performed by members of the two services, and on this principle officers of the class specified above were incorporated in the Provincial Educational Service. To the Subordinate Educational Service were added a large number of teachers previously drawing a fixed pay of Rs. 50, and the Service was then divided into eight classes with pay ranging from Rs. 50 to Rs. 250. The effect of these arrangements was to give reasonable hope of promotion to all members of both Services, while at the same time provision was made by the grant of special allowances to prevent loss to individuals.

4. Bengal Act III of 1899, the Calcutta Municipal Act, came into force with effect from the 1st April 1900. Abandoning the policy followed in the previous Acts of vesting the entire Municipal Government of the city in the Commissioners, with permission to the Chairman to exercise such powers as were not expressly reserved to the Commissioners in meeting, and subject to such conditions as the Commissioners might lay down, the new Act created three co-ordinate Municipal authorities, viz., the Corporation, the General

Committee, and the Chairman, and distributed between them the functions most appropriate to each. The entire executive power was vested in the Chairman, to be exercised independently, or subject to the approval or sanction of the Corporation or of the General Committee wherever this is expressly so directed. To the Corporation were reserved the right of fixing the rates of taxation and all those general functions which can be efficiently performed by a large body, provision being made at the same time to prevent their deliberations impeding the transaction of business. The General Committee stands between the deliberative and the executive authorities, and deals with those matters which by their nature are ill-adapted for discussion by the Corporation, and yet are too important to be left to the disposal of the Chairman alone. The total number of Commissioners was reduced to 50, of whom 25 are to be elected at the ward elections and the rest appointed by Government, the Bengal Chamber of Commerce, the Calcutta Trades Association, and the Commissioners for the Port of Calcutta. The strength of the General Committee was reduced to 12 Commissioners, one-third of whom are to be elected by the Ward Commissioners, an equal proportion by the appointed Commissioners, and the rest to be appointed by Government. Provision was thus made for the adequate representation of those commercial interests which have created modern Calcutta, but which, when left to the chances of election in the past, have found themselves hopelessly out-numbered. The Act provided Calcutta with effective building regulations, based on models of the most approved modern type, while in respect of water-supply, conservancy, drainage, and a multitude of other minor but important matters of municipal administration provision is made to ensure continuous and substantial improvement.

5. In 1899 sanction was received to the re-organisation of the Provincial Executive Service. In the years immediately preceding a large number of appointments as officiating Deputy Magistrates and Deputy Collectors had been made owing to the demand for officers for settlement and other duties outside the regular work of the Service. Under the Civil Service Regulations these officiating Deputy Magistrates could not, unless they held some substantive post, count any service for leave or pension until they had been confirmed in their officiating posts, and owing to the block of promotion caused by the insufficiency of the regular *cadre*, they thus lost seven or eight years' service. The effect of the re-organisation was to increase the number of members of the Service by 98. Sixty-five appointments were added to existing grades, and the nucleus of a new eighth grade was formed with the remaining 33. At the same time it was ordered that officiating officers might count for leave and pension all service after two years of continuous officiating service, or after the date of fully passing the departmental examinations, whichever might be later.

6. Under Regulation II of the regulations framed under section I(*a*) of the India Councils Act, 1892, for Bengal, nominations to 7 out of 20 seats are made by the Lieutenant-Governor on the recommendation of certain selected Bodies and Associations. In view of the inconvenience arising from the fact that the landed interests in Bengal had previously been inadequately represented, Regulation II was in 1899, with the sanction of the Government of India, modified so as to provide that a recommendation to a seat in the Council should be made by such Association or Associations of landholders as the Lieutenant-Governor may from time to time prescribe. To allow of this change the number of seats for which Municipal Corporations (excluding the Calcutta Corporation) may make recommendations was reduced from two to one.

7. Other administrative changes of importance during the period under review were the re-organisation of the Judicial Branch of the Provincial Service; the improvement of the Judicial Branch of the Indian Civil Service by the creation of a new grade of Judges on Rs. 3,000 a month; the appointment of a Municipal Magistrate for Calcutta; the introduction of the Sonthal Parganas Justice and Laws Regulation, 1899; the reconstitution of the grades of Civil Hospital Assistants; the transfer of the control of the Reformatory Schools from the Jail Department to that of Education; the formation of an administrative and preventive staff for the suppression of the illicit manufacture of salt in the 24-Parganas and other maritime districts; the introduction of the 'intermediate' system in the Bihar Opium Agency; the transfer of the Statistical Department of the Government of Bengal

to the control of the Director-General of Statistics; and the formation of a Mining Board for Bengal under Act VIII of 1901.

8. In May 1902 proposals for an increase in the numbers of the Subordinate Executive Service were submitted to the Government of India: the scheme is still under consideration by that Government.

POLITICAL.

9. In Sikkim the period under review was marked by general prosperity and a steady development of the resources of the State. In 1901 a Government Forest Officer was deputed to examine and report upon the State Forests near Darjeeling, and, in accordance with his recommendations, steps were taken to ensure a more careful administration of them. Public health was on the whole good, though there was a severe epidemic of small-pox in the winter of 1900, and one of less severity in 1899. Considerable sums were expended on public works, and a new palace for the Maharaja was built to replace the old building destroyed by the earthquake of 1897. In May 1900 the Maharaja, accompanied by the Kumar, paid a visit to the Lieutenant-Governor at Darjeeling, and in the cold weather of the same year the Kumar made a prolonged tour in the company of Mr. White, the Political Officer, through Burma, Ceylon, and India. In November 1901, Sir John Woodburn, accompanied by the Chief Secretary and the Commissioner of Rajshahi, went to Gangtok to return the Maharaja's visit of 1900.

10. Our relations with Bhutan continued friendly during the period under notice.

11. In Cooch Behar the material condition of the people was satisfactory, though the Census of 1901 showed that the population of the State had decreased in the ten years preceding by 11,895, the result of successive epidemics of cholera. Crops were good except in 1900-1901, when an early cessation of the rains did considerable damage to the winter rice.

12. In the Hill Tippera State the period was not one of equal prosperity. In each year except 1899-1900 one or other of the staple crops failed and caused more or less distress in parts of the State. The administration of the State improved, and increased attention was paid to education generally and in particular to that of the Thakurs, whose mental development is now said to be one of the principal aims of the Darbar. The appointment by the Raja of his eldest son as Jubraj or successor-designate to the headship of the State was contested by the Bara Thakur who appealed to Government against the Raja's action. After a careful consideration of the matter, the Bara Thakur's appeal was rejected by Government.

13. In the several Political and Tributary States of Chota Nagpur the material condition of the people varied considerably from year to year. Public health throughout the period was excellent. Some progress was made in education and in the provision of medical relief, and the arrangements for the administration of justice underwent considerable improvement. In 1901-1902 measures were taken for the better supervision of vaccination in the various States. During the period considerable changes occurred in the *personnel* of the several Chiefs, and on the 21st November 1902 there were three States (Bonai, Kharsawan, and Udaipur) under Managers appointed by, or with the concurrence of, Government. On the 7th April 1899 revised *sanads* were issued to the Chiefs of the several Tributary and Political States defining their status, powers and responsibilities, and fixing the tribute to be paid by them in the following 20 years.

14. In the Orissa Tributary States agricultural conditions varied to much the same extent as in the States of Chota Nagpur. Education made little progress, and vaccination continued to be generally unpopular. To remove the prejudices of the people against the latter, the experiment of having pupils from the various States trained in vaccination work at the Cuttack Medical School, with the object of employing them as vaccinators in the Native States to which they belong, was tried in 1901-1902, and promises to be a success. The administration of justice was on the whole satisfactory, and

in 1901-1902 considerable attention was paid to the subject of the better administration of excise in the various States. Though most of the States possess valuable forests, in none except Moharbhanj has there been any attempt at forest conservancy. On the 8th October 1902 the Government of India sanctioned the deputation of an officer of the Forest Department for a period of two years for the purpose of ascertaining the resources of the forests in the States and for formulating proposals for preserving and working them to the best advantage. On the 21st November 1902 there were four States under Government management—Baramba, Dhenkanal, Pal Lahera and Narsingpur. In Moharbhanj the administration continued to be far more efficient than in the other States. In January 1902 proposals for the introduction of a light railway into the State were sent up to the Government of India, and the project has since been sanctioned.

SURVEYS AND SETTLEMENTS.

15. GREAT activity characterised the operations of the Survey and Settlement Department during the period under review. The Orissa and Chittagong settlements were brought to a conclusion, as were those in the Khurdah Government estate, in the Bihar districts of Champaran, Muzaffarpur and Saran, and in the estates of the Raja of Hill Tippera in the districts of Tippera and Noakhali. At the end of the period under review important operations were being carried on in Darbhanga, where they are approaching completion, in Monghyr, Backergunge, the Porahat estate in Singhbhum, in certain private estates in the Sonthal Parganas, in Gaya, in the Damin-i-koh Government estate, and in the Ranchi district.

16. In Orissa where there had been no settlement since 1837, the work in connection with the new settlement extended over a period of ten years, 1889—99, and it comprised an area of 4,797 square miles. Rents were settled for a million-and-half of tenants and Government revenue was fixed for nearly 6,500 estates. The rents assessed at the previous settlement stood at Rs. 21,38,200, which the zamindars raised to Rs. 34,09,900 or by 59 per cent. during the currency of the settlement: at the last settlement they have been assessed at Rs. 38,67,600. Out of the rent-roll of Rs. 21,38,200 at the former settlement, Government took a revenue of Rs. 13,84,190 or nearly 65 per cent. of the assets, leaving the balance of Rs. 7,54,010 as the income of the zamindars, which the latter subsequently raised to Rs. 20,25,710 during the currency of the settlement. Of the assets of Rs. 38,67,600 of the new settlement, Government has fixed Rs. 21,05,073 or 54 per cent. as the revenue demand, leaving the balance of Rs. 17,62,527 as the income of the zamindars. The result has been that while the Government revenue has been raised by 52 per cent., the income of the landlords has diminished from Rs. 20,25,710 to Rs. 17,62,527 or by 13 per cent. The cost of the survey and settlement averaged Re. 1 per acre.

17. In Chittagong the settlement work which was commenced in 1888 was completed during 1898-99. Inasmuch as lands belonging to the permanently-settled estates were much intermingled with the temporarily-settled estates, the survey extended to the whole of the district, but for assessment purposes the operations only concerned the temporarily-settled portions. The total area cadastrally surveyed was 1,281,864 acres. The area assessed amounted to 329,564 acres, the net increase of revenue obtained being Rs. 2,15,327, which is equivalent to an increase of 56 per cent. on the former revenue. The full enhancement will, however, not be realisable till 1918-19, as progressive enhancements have been fixed wherever a large increase ensued. The gross cost of the survey and settlement operations averaged Re. 1-3-1 per acre.

18. In the Khurdah Government Estate work was commenced in December 1895 and completed in October 1898. The area as ascertained at the last survey is 648,154 acres. The rental has been raised from Rs. 3,00,743 to Rs. 3,77,127, and the new settlement has been sanctioned for a term of fifteen years with effect from December 1897. The cost of the operations was about Rs. 19,000, the incidence per acre in the total area of the estate being 5 annas 4 pies.

19. The operations in connection with the survey and record-of-rights of Chakla Roshnabad, the estate of the Raja of Hill Tippera in the districts of Tippera and Noakhali which had been commenced in April 1892 were concluded in June 1899. The operations resulted in an increase of Rs. 91,659 or 15·7 per cent. over the previous gross rental of the estate, which amounted to Rs. 5,84,189. The net cost of the operations was Rs. 4,73,072 which, distributed over an area of 355,467 acres actually brought under survey and settlement, gives a cost rate of Re. 1-6 per acre which is unusually high, and was due in a great measure to litigation between the parties interested.

20. In North Bihar, survey and record-of-rights have been completed in the districts of Muzaffarpur, Champaran and Saran, but the final report for Saran has not yet reached the Government. Simultaneously with the passing of the Bengal Tenancy Act in 1885, operations were commenced experimentally in the district of Muzaffarpur. When 235 villages had been dealt with, without any friction or serious difficulty, the operations were terminated in 1886 on the abandonment of the Patwari Bill of 1885, in accordance with the orders of the Secretary of State. The resumption of the operations was sanctioned in 1891, and in November of that year, a survey of the four districts of Muzaffarpur, Champaran, Saran and Darbhanga was ordered. The operations have subsequently been extended to those portions of the districts of Monghyr and Bhagalpur which lie to the north of the Ganges. The survey and record-of-rights in Muzaffarpur and Champaran were completed in the year 1899-1900, the areas dealt with being 3,035 and 3,250 square miles, respectively. The holdings in Muzaffarpur numbered 970,495 with an average area of 1·97 acres, and 4,413,567 plots of an average area of ·44 of an acre were measured. In Champaran, which is the most backward district in North Bihar, 400,592 holdings, with an average area of 5·19 acres, and 2,807,976 plots, with an average area of ·74 of an acre, were recorded. The work of settling fair rents was insignificant in the district of Muzaffarpur, but in Champaran cases for the settlement of raiyats' rents were instituted in respect of about one-third of the rent-paying holdings. In both districts there was little increase of rent except on the ground of "excess area." The net cost of the operations has been Rs. 346-6 per square mile or about annas 8-8 an acre in Muzaffarpur, and Rs. 258-5-4 per square mile or annas 6-6 an acre in Champaran. One-fourth of the cost of the operations has been borne by Government, and the remaining three-fourths have been recovered, practically in full, from the landlords and tenants. The success achieved in the work of recovering the cost has altogether exceeded expectation. The eagerness with which the raiyats have come forward to pay their share of the cost of the operations and obtain their copies of the record-of-rights is an eloquent testimony to the value which the people themselves set on the settlement proceedings.

21. The objects with which the various settlement operations, which were still being conducted at the end of the period under review, were undertaken were of a varied character. In Darbhanga and Monghyr the operations form part of the great project which has been at work since 1892 in the districts of North Bihar, for recording and establishing the statutory tenant-right of the raiyats. In Backergunge the extraordinary complexity of landed interests has led to serious disturbances, and the object of the settlement there is to give peace to the district by the preparation of an authoritative record of all titles in land. In the Porahat Estate in Singhbhum and in certain private estates in the Sonthal Parganas, the proprietors have applied for a resettlement in order to get rent assessed upon large areas, which their tenants have brought under cultivation since their rents were last fixed. In Gaya disputes between a landlord and his tenants have reached such a stage that a record-of-rights is necessary to settle them. The Damin-i-koh Government Estate is being surveyed with a view to the resettlement of the Government revenue, and finally the operations in the Ranchi district have been undertaken with the object of putting an end to the agrarian disputes which culminated in the serious Munda riots of 1899.

22. In addition to the settlement work carried on under the control of the Director of Land Records, a number of petty settlements were made during the period under the supervision of Commissioners of Divisions.

LAND RECORDS.

23. The Land Records Maintenance Act, III (B.C.) of 1895, which was extended to portions of two surveyed districts only, has failed to secure the proper record of mutations of names in settlement records. The Act provides for the voluntary registration by all classes of tenants of mutations caused by inheritance and by transfers of other kinds that are not otherwise brought to the notice of the local Registrars and Sub-Registrars. It also provides that all transfers of landed property registered by these officers as Registrars of Assurances shall be brought by them automatically into the Mutation Registers. The real success of the scheme depends upon the extent to which the tenants take advantage of the opportunity given for the voluntary registration of successions and other minor transfers, and it is in this respect that the Act has failed conspicuously. In the first year of the full working of the Act (1897-98) the number of registrations in the three mutation offices experimentally opened at Bettiah in Champaran, and Hajipur and Mahnar in Muzaffarpur, fell far short of the probable number of transactions, and the number of registrations has since steadily fallen off.

24. The Act having failed to secure the end for which it was passed, the question whether the settlement records in the cadastrally surveyed districts of the Province should be continuously maintained by a permanent land records staff, or whether the records should be revised by regular survey at intervals, has been under the consideration of the Government of India.

25. Rules in the Survey and Settlement Manual provide for the registration of mutations of tenant rights and for inspection and correction of rent-rolls in Government and Wards' estates, but the returns submitted to the Director of Land Records under these rules show that a large proportion of mutations, in both classes of estates, are unreported.

GOVERNMENT, AND WARDS' AND ATTACHED ESTATES.

26. The only change of importance that occurred during the period affecting the administration of Government estates was that in 1901-1902 a portion of the *khas mahal* establishment employed in the province was declared permanent and pensionable. The total number of estates under direct management increased from 2,817 in 1898-99 to 2,985 in 1901-1902; of the latter, 240 estates belonged to private individuals. The current demand of the 240 estates was Rs. 5,87,265, and of those belonging to Government Rs. 36,39,296. Collections were on the whole good: in 1901-1902 the total collections were 99·01 of the current demand.

27. The condition of the raiyats on the several Government estates, with the exception of those belonging to the Palamau estate, was satisfactory. In the Palamau estate there have been bad seasons and numerous desertions in recent years, and the condition of the raiyats there is receiving special attention.

28. In 1898-99 there were in all 135 estates under the management of the Court of Wards: in 1901-1902 the number rose to 140. Of these 66 were Wards' estates proper, 4 attached estates, 7 trust estates, and 63 encumbered estates in Chota Nagpur. During 1901-1902 the Burdwan Raj, which with its rental of 48 lakhs and land revenue of nearly 35 lakhs was much the most important estate under the management of the Board, passed into the hands of its proprietor after 17 years' management by the Court of Wards.

29. The revenue and cesses due to Government from Wards' and Attached Estates were generally punctually paid, the total payments in 1901-1902 representing 98 per cent. of the demand of the year which was Rs. 56,34,430. The total collections (100·4) of rent and cesses were in 1900-1901 the best on record for twenty years with one exception, and in 1901-1902 they were almost as good, averaging 100 per cent. The number of certificates filed in the four years 1898-99—1901-1902 was 7,246, 8,935, 11,875, and 10,932. During the period under review the condition of the tenantry was on the whole good, and their relations with the managing agency satisfactory.

LAND REVENUE ADMINISTRATION—REVENUE AND RENT-PAYING CLASSES.

30. At the close of the year 1901-1902 there were in all 186,747 estates in the three classes of (*a*) permanently-settled estates, (*b*) temporarily-settled estates, (*c*) estates held direct by Government. In the first class there were 173,494, in the second 10,268, and in the third 2,985. The current demand of the year from estates in class I was Rs. 3,23,27,156, from those in class II Rs. 35,36,321, and from those in class III Rs. 42,26,561. Collections were uniformly good throughout the period under review, and in 1901-1902 the percentage of total collections to current demand was practically cent. per cent. Remissions averaged yearly Rs. 1,59,323: the year in which they were greatest was 1898-99, when out of the total remissions (Rs. 1,93,850), Rs. 1,22,346 were written off in Chittagong on account of the serious damage done by the cyclone and storm-wave of October 1897. The number of certificates filed steadily increased from 211,341 in 1898-99 to 230,570 in 1901-1902. In 1900, the Board of Revenue submitted proposals for fixing revised standards of current collections in temporarily-settled estates and 21 estates held direct by Government. These proposals were accepted practically *en bloc* by Government.

31. The Partition Act worked smoothly. At the end of 1897-98 there were 1,469 partition cases pending in the Patna, Bhagalpur, and Dacca Divisions, but by the end of 1901-1902 the number had been reduced to 1,013. The number of applications for mutation under the Land Registration Act steadily increased from 57,976 in 1898-99 to 84,447 in 1901-1902: this result is attributed to more vigorous action under the provisions of the Act. Advances under the Land Improvement Loans Act, XIX of 1883, were, in the four years 1898-99 to 1901-1902, Rs. 35,268, Rs. 55,588, Rs. 53,883, and Rs. 71,649, and under the Agriculturists' Loans Act, XII of 1884, Rs. 26,403, Rs. 67,489, Rs. 2,68,165, and Rs. 69,413: the increase in 1900-1901 was due to the large amount advanced in the Ranchi and Palamau districts.

32. In October 1900 the Government of India enquired whether any useful action could be taken by the Government of Bengal to encourage the formation of agricultural banks or co-operative credit societies, and asked what assistance and concessions should be given to them. The subject was considered by the Board of Revenue, in conference with selected officials and non-official gentlemen; and the Lieutenant-Governor, agreeing in the view taken in this conference that an attempt should be made to establish such banks on the principle of friendly co-operation, decided to depute a special officer to initiate experimental village banks in selected tracts. Mr. P. C. Lyon, I.C.S., was accordingly deputed in November 1901 to take such steps to encourage the formation of credit societies as might appear to him to be in harmony with local requirements. Mr. Lyon made a short tour in the United Provinces of Agra and Oudh to observe the working of the agricultural banks started there. As the result of his deputation, ten village banks were started during 1901-1902, and there are now in existence 48 such banks, the greater number of which were started during the period under review. Twenty of these are in Government estates, 16 in Wards' estates and 12 in private estates.

33. The relations between landlords and tenants during the period were on the whole satisfactory. The Bengal Tenancy Act worked smoothly, and its provisions are every year becoming better known.

LEGISLATION.

34. The only Act of importance passed by the Bengal Legislative Council during the period under review was the Calcutta Municipal Act, 1899 (Bengal Act III of 1899).

35. In 1898-99 four Acts were passed, namely, Bengal Acts I, II and III of 1898, and Bengal Act I of 1899. Act I of 1898 extended to the town and suburbs of Calcutta the provisions of sections 15, 15A and 16, of the Police Act,

V of 1861, as amended by the Police Act, 1861, Amendment Act, 1895 (VIII of 1895). The sections relate to the quartering of additional police, at the cost of the inhabitants, in areas which are in a disturbed or dangerous state, and the award of compensation to sufferers from the misconduct of the inhabitants of such areas. Act II of the same year was passed to facilitate the transfer of the export trade from the Calcutta jetties to the Kidderpore Docks by authorising the Commissioners for the Port of Calcutta to make special arrangements with respect to goods passing through their hands, by which they would undertake a greater responsibility for loss, destruction or deterioration than that which is imposed upon them by section 112 of the Calcutta Port Act, 1890. Act III of 1898 was passed to clear up doubts and difficulties which had been experienced in the working of Chapter X of the Bengal Tenancy Act, 1885. Provisions were also introduced to facilitate the settlement of rents, when undertaken on a large scale. Act I of 1899 was a General Clauses Act for the Province adapted from the similar Act previously passed by the Legislative Council of the Governor-General.

36. In 1899-1900 three Acts were passed, namely, Bengal Acts II and III of 1899, and Bengal Act I of 1900. Act II of 1899 repealed the Civil Courts Amins Act, 1856 (XII of 1856), in Bengal. Act III of 1899 amended the law relating to the municipal affairs of the town and suburbs of Calcutta, and authorised the extension of the same to the town of Howrah. The important changes in the constitution of the Calcutta Municipality introduced by the Act have been already described under "Changes in the Administration." Act I of 1900 amended the Bengal Municipal Act, 1884 (Bengal Act III of 1884) in its application to Darjeeling.

37. In 1900-1901 two Acts were passed, namely, Bengal Acts II and III of 1900. Act II of 1900 was passed (1) to remove doubts which had been raised as to whether certain appointments made under prior Acts are continued by the Calcutta Municipal Act, 1899, and (2) to validate the appointments of certain Bodies and Associations. Act III of 1900 was passed to amend Bengal Act I of 1869 (the Bengal Cruelty to Animals Act) by inserting a new section, so as to (1) admit of animals which have been cruelly used being sent to an infirmary, and (2) to provide for the recovery from the owners of such animals of the cost of their treatment in the infirmary. In addition to these Acts one Bill was before the Council during the year. Its object was to give effect to an agreement for the introduction of electric traction throughout the tramway system of Calcutta, and it was passed as Bengal Act IV of 1900.

38. No Act was passed by the Bengal Council during the year 1901-1902. Only one Bill was introduced in Council, namely, a Bill to extend the Calcutta Electric Lighting Act, 1895, to the Howrah Bridge. This Bill was passed as Bengal Act I of 1902 after the close of the year, as was also the Bengal Drainage (Amendment) Act, 1902 (Bengal Act II of 1902).

POLICE.

39. POLICE administration in Bengal has long been recognized as unsatisfactory, and during 1901 a close and minute examination of the system prevailing was made by Government. The result was to convince Sir John Woodburn that in no branch of the administration was radical reform so imperative as in that which deals with police matters. To this end far-reaching proposals were submitted in December 1901 for adding to the superior cadre, for increasing the numbers and improving the prospects of the inspecting and investigating agencies, and for securing the better conduct of police prosecutions before the courts. During 1902 similar detailed recommendations for the improvement of other portions of the force, including the Calcutta Police, the Municipal Constabulary, and the Railway and River Police were forwarded for the consideration of the Government of India, and of the Police Commission appointed to enquire into police administration in India generally. Two matters in connection with police administration to which Sir John Woodburn devoted much attention were the improvement of the position of the village chaukidar and a larger use by the police of the discretion given them to refuse investigation under section 157, Criminal Procedure Code. Sir John was

strongly convinced of the good results to be anticipated from raising the status of the village police force, which is the backbone of police administration in Bengal, and he lost no opportunity of impressing on District Officers the necessity for sympathetic treatment of this branch of the force. The effects of this policy are obvious in the figures of the period. The daffadari system was extended to practically the whole of the Province, the salaries of the chaukidars were more regularly paid, and the rewards received by them increased between 1899 and 1902 by 33 per cent. In June 1902 the Government of India sanctioned the introduction of a scheme for recognising merit on the part of chaukidars by the grant to them of silver badges. In regard to the refusal of investigation under section 157, Criminal Procedure Code, police officers in Bengal had in previous years shown a reluctance to exercise the discretion given them in the matter, and the figures for 1899 showed that enquiries had been made into over 91 per cent. of housebreaking cases and into 89 per cent. of cases of theft. It appeared to Sir John Woodburn that the energies of the police were to a great extent being frittered away in the investigation of petty cases of this nature in which detection was often hopeless from the outset, and the attention of the department was drawn in 1900, and with greater insistence in 1901, to the necessity for wider use of the discretion to investigate, with the result that for the year 1901 the percentage of refusals in housebreaking cases rose to 20·5 and in theft cases to 14·1.

40. During the period under review good progress was made in the scheme for substituting sub-inspectors for head constables in the investigating agency and in the extension of the Chaukidari Act, VI of 1870. In the Sonthal Parganas parts of the district are under the regular police, and in other parts the work is done by an indigenous agency. To systematise the latter and bring it more in line with the rural police in the rest of the Province a Regulation (III of 1900) was issued, and came into force at once. The only other changes in police administration during the period were the formation of a fourth company of Military Police, which was sanctioned by the Secretary of State in January 1899, and an addition of 282 officers and men, to the Calcutta Police of whom 89 formed a new armed force.

41. The following are the figures for serious crime for the four years 1898—1901:—

	1898.	1899.	1900.	1901.
Murders	376	375	400	373
Riots	1,641	1,507	1,261	1,305
Robberies	239	195	229	239
Dacoities	332	255	333	358
Burglaries	33,965	32,606	38,470	39,916
Thefts	28,435	27,353	31,174	32,942

The large increase in 1900 and 1901 in burglaries and thefts is attributed to the high prices which prevailed throughout the Province during those years.

42. The expenditure on police during the years under review was—

	Rs.
1898-1899	60,22,630
1899-1900	60,00,050
1900-1901	60,64,642
1901-1902	61,90,537

43. During the years under report the police in the mufussal had much additional work thrown upon them in consequence of the prevalence of plague and the taking of the census, and moreover most districts were generally undermanned. The conduct of the force as shown by the figures for judicial and departmental punishments, was on the whole good.

44. In Calcutta the police generally did good work; but the carters' strike which occurred in the city in June 1901 was in part ascribed, not without reason, to habitual blackmailing of carters and hackney carriage drivers by members of the force. After the strike revised arrangements were introduced for the control of the traffic between Howrah Station and the Strand Road, the chief feature of which was the employment under the Commissioner of Police of a European Traffic Superintendent, and a considerable proportion of European constables.

45. To ensure more effective co-operation between the Bengal and Calcutta Police, the desirability of which had long been obvious, orders were issued at the end of 1901, that the Commissioner and Deputy Commissioner of Police Calcutta, the District Superintendents of Police Howrah and the 24 Parganas (or in case of the latter's inability to attend) the Assistant District Superintendent of Police of that district, and the Assistant Inspectors General, Railway Police, at Sealdah and Howrah should meet once a fortnight and deal with any cases occurring or likely to occur in or near Calcutta or Howrah in which assistance or co-operation might be required by the officers primarily engaged on them.

ADMINISTRATION OF JUSTICE.

46. THE chief changes during the period under review affecting the staff employed in the administration of justice were the reorganisation of the Judicial Branch of the Indian Civil Service, the appointment of an Additional District and Sessions Judge for Jessore, Khulna and Backergunge, the appointment of a Municipal Magistrate in Calcutta, an increase in the number of Subordinate Judges, a regrading of Munsiffs, and lastly the strengthening of the Bench and office establishment of the High Court on the Original Side.

47. For some years there had been complaints that the attractions and prospects of the Judicial Branch of the Civil Service were inferior to those of the Executive Branch, with the result that the former was unpopular and was avoided by most of those who had to make their choice between the two branches of the Service. Representations were made on the subject, and during 1898 the Secretary of State sanctioned proposals by which the salary of a Judge of the High Court in Calcutta was raised to Rs. 4,000 per mensem, and certain alterations were made in the leave rules applicable to the High Court. At the same time it was ruled that a High Court Judge should be called on to retire on attaining the age of 60. It was also proposed that a grade of Judges on Rs. 3,000 per mensem should be formed intermediate between the existing first grade of Judges and the High Court, and in 1899 sanction was received to a scheme by which a grade of three Judgeships on Rs. 3,000 a month was established, the special appointments of Legal Remembrancer and Judicial Commissioner in Chota Nagpur being merged in the general cadre of Judges.

48. Owing to the heavy work in the districts of Jessore, Khulna, Backergunge, Dacca and Mymensingh, a proposal was made by Government in 1897 for the appointment of another Additional District and Sessions Judge for Jessore, Khulna and Backergunge, so as to admit of the existing Additional Judge being employed for Dacca and Mymensingh alone. The proposal was sanctioned by the Secretary of State in December 1898.

49. For some years attention had been drawn to the state of the files in the Presidency Magistrates' Courts and the congestion appeared to be due largely to municipal cases, the number of which had become very great. Advantage was therefore taken of the new Calcutta Municipal Act to appoint a Municipal Magistrate to be paid by the Corporation, and the post was conferred upon a member of the Provincial Civil Service, with effect from the 1st February 1901.

50. In order to enable the Subordinate Judges to keep pace with the growing complexity of litigation in Bengal, the Secretary of State sanctioned in March 1902 an addition of four to their numbers. Sanction was at the same time accorded to the revision of the grades of Munsiffs in Bengal, with the object of raising the average pay of officers of the Judicial Branch of the Provincial Service to the level of the average pay of officers of the Executive Branch.

51. In April 1902 in consequence of representations as to the delays in the disposal of suits owing to the congestion of work on the Original Side of the High Court the Secretary of State sanctioned the appointment of an Additional High Court Judge. At the same time sanction was given to a scheme for substantially strengthening the ministerial staff on the same side of the Court.

52. In 1901 the judicial staff available for the administration of criminal justice consisted of 29 Sessions Judges, 8 Additional Sessions Judges,

2 Assistant Sessions Judges, 431 stipendiary and 1,821 Honorary Magistrates. With the introduction of Act V of 1898 pleaders practising in any Criminal Court were disqualified from sitting as Honorary Magistrates within the jurisdiction of that Court. In July 1898, in accordance with the provision contained in section 14 (2) of the Criminal Procedure Code, the Lieutenant-Governor directed that in future Honorary Magistrates should be appointed for a period of three years, renewable on the recommendation of the local officials.

53. An important change was made in the administration of criminal justice in the Sonthal Parganas by the introduction of the Sonthal Parganas Justice and Laws Regulation, 1899, which received the assent of the Governor-General in August of that year and came into force at once. In regard to criminal jurisdiction, Regulation No. V constituted the Sonthal Parganas a Sessions Division, the Court of the Deputy Commissioner the Court of Sessions of the division, and the Deputy Commissioner the Judge of the Court of Sessions. It also provided that the High Court at Calcutta should (1) exercise jurisdiction in regard to European British subjects, (2) deal with all cases in which sentences of death have been passed, and (3) hear all appeals from orders of acquittal. The new Regulation of 1899, which amended Regulation V of 1893, constituted the Court of the Sessions Judge of Birbhum the Court of Sessions for the Sonthal Parganas Sessions Division, and the Sessions Judge of Birbhum the Judge of the Court of Sessions, the powers of a Sessions Judge formerly exercised by the Deputy Commissioner being withdrawn from him. It further provided that the High Court at Calcutta in addition to its jurisdiction under the Regulation of 1893 should exercise appellate and revisional jurisdiction in respect of all Sessions cases tried by the Judge of Birbhum, and that the Deputy Commissioner should have appellate jurisdiction over the Subordinate Courts of the district, while the Commissioner should have appellate jurisdiction over the Deputy Commissioner, and revisional jurisdiction over all the Courts of the district.

54. The only legislation carried out during the period affecting the administration of Civil Justice in the Province was the passing of Act II (B. C.) of 1899, which repealed the Civil Court Amins' Act, 1856, so far as it applies to Bengal. Messrs. J. F. Stevens and G. Toynbee, when submitting their report on the strength and pay of the ministerial establishments of Bengal, some years previously had brought to notice the very unsatisfactory working of Civil Court amins, and recommended their abolition. The view expressed by these officers was accepted by the Lieutenant-Governor and eventually by the High Court, and given effect to by the Act above. In October 1901 a rule was issued by Government under section 392 of the Code of Civil Procedure, for the guidance of District Judges, laying down that Commissions, for which a knowledge of surveying is requisite, should ordinarily only be issued to persons holding certificates of proficiency in that subject. An examination of pleaders in surveying is now held annually.

55. The number of original suits instituted in 1898 was 591,793. In 1899 there was a large increase to 607,630, and in 1900 a still larger one to 648,525. In 1901, however, the figures dropped to 606,292. The High Court, when comparing the figures for 1900 with those for 1890, pointed out that there had been a regular and continuous increase amounting in all to 42·1 per cent. in the number of original suits since 1890 when they only numbered 456,463; that the greater part of the increase had occurred in uncontested suits, and that the largest proportionate increase had been under "title and other suits" (99 per cent.) and "rent suits" (51·6 per cent.), the latter being spread over the whole of the Province. The decrease in 1901, which occurred entirely in uncontested litigation, the High Court attributed not to any decrease in the volume of litigation but to the fact that the year 1900 being a prosperous one creditors took advantage of it to realise debts which might otherwise have been left over to 1901. Of the original suits disposed of in 1901 (628,662) Munsiffs disposed of no fewer than 598,255. The number of pending suits increased each year till 1901, when they were reduced to 107,837. In that year the Courts were, for the first time since 1895, able to do more than keep pace with the current work coming before them.

56. The receipts of the Civil Courts were, in 1901, Rs. 1,10,76,209, and charges amounted to Rs. 55,55,890. Including the amount realised on

account of duty on probates, etc., the surplus to Government from civil litigation was in that year over 55 lakhs of rupees. It is instructive to compare this figure with the results of 1891, when the surplus to Government was only 40 lakhs.

JAILS.

57. In 1898 and 1899 the jail population varied little from the normal average. In 1900 there was a sharp rise, the result of the high prices which prevailed throughout the year. In 1901 there was a still further increase, due, as in the previous year, to high prices, and the number of prisoners confined as well as the daily average population were the highest on record. In 1898 and 1899, in spite of the fact that the jail population presented little variation from the normal, several of the jails were at times overcrowded. With the large increases in 1900 and 1901 in the number of prisoners, although in the former year the deportation to Port Blair of prisoners sentenced to transportation for a term was resumed, the margin between the daily average population and the jail accommodation became extremely narrow. It was consequently found necessary to make a special grant of 1½ lakhs for the provision of additional accommodation; and even this may have to be considerably supplemented if the jail population remains at its present high figure.

58. The health of the prisoners was on the whole exceptionally good throughout the period of Sir John Woodburn's administration. In 1898 the death-rate was only 22·5, and in 1899 only 23·4: 1900 was an unhealthy year in the province generally, but the jail death-rate (40·3) exceeded considerably the provincial (36·63). In eleven of the jails the death-rate was over 60 per mille. In 1901 there was a very satisfactory improvement, and the death-rate fell to 27·5, or four per mille below the figure for the whole province. Only 27 cases of plague occurred in the jails, of which 13 proved fatal; considering the extent to which the disease has prevailed in Bihar and Calcutta, the low mortality resulting from this disease speaks highly for the preventive measures taken by the several Superintendents. A noticeable feature of the jail mortality of the period was the number of deaths from cerebro-spinal fever in the Bhagalpur Central Jail, where it has been practically endemic since 1897. In 1900 there were 22 fatal cases and in 1901 there were 32. At present very little appears to be known of this disease, its causes, and the means of prevention, but every measure suggested by the medical authorities for stamping it out was adopted.

59. The manufactures carried on in the various jails continued to show satisfactory results, and received considerable impetus from the war in South Africa. Soon after taking over the administration of the Province, Sir John Woodburn came to the conclusion that there was a tendency on the part of the jail authorities to employ too large a proportion of the prisoners on the light duties of the jail and on gardening; and to ensure the exaction of more penal labour from prisoners sentenced to rigorous imprisonment, orders were issued that the number of those employed as prison officers and servants should be considerably reduced, and that the size of certain of the jail gardens, which were unnecessarily large, should be curtailed. Sir John Woodburn took much interest in the working of the mark system, and on more than one occasion examined in great detail the figures submitted by the Inspector-General of Jails showing its effect on prison discipline. The conclusion arrived at by him at the time of the last examination made was that the opinion of the Jail Superintendents, who with few exceptions considered the system a valuable aid to discipline, was not conclusively borne out by the statistics as to punishments and the award of marks.

60. In 1899 the two reformatory schools in the Province, which had previously been under the control of the Jail Department, were, under the orders of the Government of India, transferred to the control of the Education Department. In the same year the sanction of the Government of India was received to the establishment of a depôt in the Bhagalpur Central Jail for the confinement of girl criminals sentenced to periods of imprisonment exceeding three months. In order to facilitate recruitment and strengthen discipline, a scheme for the improvement of the warder service, by the re-adjustment of

grades and increase in the rates of pay, was submitted to the Government of India, and sanctioned by that Government during 1900.

REGISTRATION.

61. THE figures for the period under review indicate clearly a growing tendency on the part of the people to avail themselves more and more of the facilities given them for registration. At the beginning of April 1898 there were in all 423 Registration offices open, and by the 21st November 1902 the number had risen to 448. In 1901-1902 the total operations numbered 14,40,347, which would appear to be the highest figure yet recorded in Bengal, and the surplus on the year's working of the Department amounted to Rs. 7,67,895.

62. Increased advantage was taken of the provisions of the Muhammadan Marriage Registration Act, I (B.C.) of 1876; and the number of ceremonies registered rose steadily from 19,833 in 1898-99 to 28,513 in 1901-1902.

MUNICIPAL ADMINISTRATION AND LOCAL SELF-GOVERNMENT.

63. THE important changes introduced in the constitution of the Calcutta Municipality by the new Calcutta Municipal Act, III (B. C.) of 1899, have been detailed under "Changes in the Administration." The inefficient administration which characterised the old constitution was notorious, and any municipal progress attained in the city in the period under review is to be looked for in the years subsequent to the introduction of the new Act on April 1st 1900. In spite of the forebodings of those who were opposed to the new measure, the anticipations formed by those responsible for it have been more than realised in the results of the two years 1900-1901 and 1901-1902. The revised constitution has worked smoothly, and has resulted in far reaching reforms in many details of municipal administration. The town has been divided into four districts, each completely manned with a Health and Engineering Department of its own, so arranged as to be easily controlled by the Central Office. The co-operation of Ward Commissioners has been invited, and the development of the system by which the services of Municipal Commissioners interested in the conservancy and improvement of the districts, which they represent, can be fully utilised, promises excellent results. The Collection Department has been reorganised and has been amalgamated with the Warrant Department, and the removal of the anomaly under which the Collector had no coercive powers and warrants were issued by a separate department has resulted in great improvement in collections, which in 1901-1902 were 98 per cent. of the current demand. It is satisfactory to find that this result was obtained without any undue coercion, for out of the total collections of the year (Rs. 42,05, 935) only 2½ per cent. was realised by coercive measures. The Building Department has been reorganised and placed under the Deputy Chairman with four qualified surveyors who have taken the place of the large establishment previously employed under the Road and Engineering Department. The work of the Department has been considerably facilitated by the appointment of the new Municipal Magistrate, who has after local enquiries caused many works to be carried out in accordance with the regulations. In the Accounts Branch revised rules have been framed with the help of an officer of the Public Works Accounts Department in order to secure the speedy audit and payment of bills for work done for the Municipality. The policy of *bustee* improvement has been pushed on with vigour, and at the end of the period under review work was going on or in contemplation in more than 100 *bustees*. Other improvements have been the reorganisation of the Secretary's office and the workshop and the abolition of the Store Department which was the source of much wasteful expenditure in the past. The finances of the Corporation are in a thoroughly sound condition, and the valuation of the town has increased by over 14 lakhs since the introduction of the new Municipal Act.

64. The unsatisfactory condition of the tramway lines and the horse traction employed by the Calcutta Tramways Company, Limited, led to a long

discussion between the Corporation of Calcutta and the Company, which resulted in the framing of a new agreement, the main features of which were the substitution of electric traction by means of over-head wires for the present horse traction, the postponement of the Corporation's right to purchase the tramways to the 1st January 1931, and the restriction of the fixed track rents payable by the Company in respect of the existing tramways to Rs. 35,000 a year. A bill was introduced in the Bengal Legislative Council to give validity to the new agreement, and was eventually passed as Act IV (B. C.) of 1900.

65. The number of municipalities, excluding Calcutta, in existence at the beginning of 1898-99 was 151, and at the end of 1901-1902, 157. The total number of rate-payers in the latter year was 487,767, or 17·1 per cent. of the total municipal population. The main form of municipal taxation is either a rate on holdings or a tax on persons according to their circumstances and property within the municipality. In 1901-1902 the former system was in force in 43 of the municipalities, and the latter in the remainder excluding Bhadreswar where both forms of taxation are in force in different wards.

66. On the whole municipal administration outside Calcutta improved during the period to a gratifying degree. The most important event of the period in this connection was the passing of Act I (B.C.) of 1900, which amended the Bengal Municipal Act III (B.C.) of 1884 in its application to Darjeeling. The disastrous land-slips which took place in the town during September 1899 brought out clearly that the existing law, which had been framed with reference to the requirements of towns in the plains, was in many ways defective and unsuitable to the circumstances of a hill station, and by the new Act considerable additions were made to the powers of the local authorities in regard to roads, drains, and bridges, whether public or private. Power was taken to enforce the repair, and in extreme cases the removal, of any building, which threatened the security of a hill-side or bank, and to compel the owners to protect the sites when insecure. Extensive powers were also taken to enforce the construction of revetments and retaining walls, the turfing of banks, and the sloping of hill-sides to the angle of safety. A complete set of building regulations was provided, based generally on the provisions of the new Calcutta Municipal Act, but considerably simplified.

67. The total income and expenditure of the mufassal municipalities during the four years 1898-99 to 1901-1902 were—

	Income.	Expenditure.
	Rs.	Rs.
1898-1899	38,46,349	37,63,175
1899-1900	42,00,441	40,83,170
1900-1901	43,76,219	43,72,575
1901-1902	45,57,338	45,56,164

Collections were, on the whole, good, and especially so in 1901-1902 when they averaged 98·8 per cent. of the current demand, and the Commissioners of nineteen municipalities realised practically the whole of the demand. The most important exception to these satisfactory results was the Howrah Municipality, where for some years past collections have been poor. Of the total municipal expenditure during 1901-1902, 31·3 per cent. was on Conservancy, 16·5 on Public Works, 11·8 on Medical, 10·0 on General Establishment, 6·1 on Water-supply, 6·0 on Lighting, 4·2 on Drainage, and 3·2 on Education. During the period several large schemes for water-supply and drainage, especially in the towns near the metropolis, were carried out.

68. The means by which municipalities should be enabled to obtain the services of a competent engineer in carrying out important municipal works, and the terms upon which such assistance should be given them having in the past given rise to frequent discussion, rules were laid down in 1900-1901 defining the relations between Municipalities and District Engineers, and prescribing the procedure to be adopted by the former in obtaining professional assistance for engineering works.

69. The Puri Lodging House Act, IV (B.C.) of 1871, as amended by Acts II (B.C.) of 1879 and I (B.C.) of 1884, worked satisfactorily during the period in

all places where it was in force. Its provisions were extended to Jessidih Bazar in the Deoghur Subdivision, and to the railway stations at Jatni, Kolapara, Chattipur, and Balugaon, and withdrawn from Gewankhali. The number of lodging-houses in existence at the beginning of 1898-99 was 1,678, and at the end of 1901-1902, 1,912. The income and expenditure of the fund increased from Rs. 38,471 and Rs. 37,247, respectively, in 1898-99 to Rs. 63,106 and Rs. 57,415 in 1901-1902. The health of the pilgrims was, on the whole, eminently satisfactory, though there was considerable mortality amongst them at Puri from cholera in 1899-1900.

70. The Bengal Local Self-Government Act, with the exception of the provisions relating to Union Committees and the elective system, was extended, with effect from the 1st April 1900, to all the districts of the Chota Nagpur Division except Singhbhum. This was practically the only change in the period affecting the administration of the Act in the Province. At the end of 1901-1902 there were in existence 42 District Boards, 106 Local Boards, and 56 Union Committees.

71. The District Boards continued to administer the large funds entrusted to them with care and efficiency, and the period under review was one of satisfactory progress in almost all directions. The expenditure of the Boards rose from Rs. 66,74,415 in 1898-1899 to Rs. 83,11,738 in 1901-1902. Local Boards have far less scope, and though useful work is done by some of them, it is probable that they can only be worked satisfactorily where active Chairmen and Vice-Chairmen are available. Union Committees with but few exceptions have failed through want of opportunity or desire to serve any useful purpose, and it is not proposed to extend the system except to localities where the residents show signs of a desire to help themselves.

72. In 1900-1901 a grant of five lakhs of rupees was made from provincial revenues for the improvement of communications in the several Divisions of the Province. The reports from the Commissioners showed that the divisional allotments were satisfactorily made, and the money distributed with due consideration for the relative needs of each district. About one-third of the amount was allotted for feeder roads, about the same amount for bridges, about one-fifth for extensions of communications, and the balance for metalling existing roads. It was found possible to renew the grants during the year 1902-1903. During 1901-1902 8,666 roads, with a total mileage of 44,472 miles, were maintained by the various Boards at a total cost of Rs. 32,02,917. Of the total length 3,170 miles were metalled, 24,406 miles unmetalled, and 16,895 miles were on village roads. Under the orders of Government working plans for tree-planting operations on the roads under the several District Boards for a period of five years, commencing 1902-1903, have been prepared in the majority of districts.

73. In 1901-1902 steps were taken to ensure a more efficient professional control over civil works undertaken by the District Boards. These will be found detailed under "Public Works." During the period under review a Bill was prepared to remove defects and omissions in the Local Self-Government Act, and has since been submitted to the Government of India.

VOLUNTEERING.

74. TWELVE Volunteer Corps were in existence in 1902. The total number of Volunteers in Bengal, excluding officers in 1901-1902 was 4,884. The most important event during the period under review was the raising in 1900 of the Volunteer Corps known as Lumsden's Horse for service in the Boer War in South Africa. The Corps was largely composed of representatives of the Volunteer Corps in Bengal, especially of the Bihar Light Horse, and did excellent service in the war. Other events of the period were the re-organization of the Calcutta Port Defence Corps in 1899, the formation of the Assam-Bengal Railway Volunteers and the Eastern Bengal Volunteer Rifles, the transfer of the control of the Bengal-Nagpur Railway Volunteers to the Government of Bengal, and the amalgamation of the Central Bengal Horse with the Calcutta Light Horse, all in 1901. Sir John Woodburn who had himself served as a Volunteer for some years took a great interest in the movement.

MARINE.

75. THE chief matters of interest to all ports in Bengal which came before the Marine Department during the period under review were—the provision of more accommodation for lascar seamen on merchant vessels, and the framing of rules (1) for the prevention of collisions in inland waters, (2) for the import and transport of carbide of calcium, and (3) for the prevention of the introduction of plague by sea.

76. The question of the insufficiency of the space allotted to lascars on merchant ships had been before Government for some time, and in 1898-99, at the instance of the Government of India, all officers connected with shipping, as well as the Bengal and National Chambers of Commerce and the Muhammadan Associations, were consulted as to the advisability of requiring the provision of more space for such seamen. Eventually the Lieutenant-Governor expressed his opinion that the space provided was ample, and that it was undesirable to compel, by law, the provision of a larger crew space.

77. At the beginning of 1900-1901 draft rules under section 30A of the Inland Steam-vessels Act for the protection of inland steam-vessels from collision, which had been approved by the Government of India, were published for criticism. No objections having been raised, the rules were finally passed and published. The rules are not applicable to the river Hooghly between a line drawn west of Saugor Island Light-house and the north boundary of the Port of Calcutta.

78. Draft rules for the importation, transport, and possession of carbide of calcium, a commodity in which there promises to be a considerable trade in Bengal, were published for criticism on the 19th March 1901 and after full consideration of the criticisms offered were finally submitted to the Government of India for sanction.

79. At the instance of the Medical Department of this Government certain rules were issued on the 18th March 1901 in respect of arrivals by sea for the medical inspection, isolation, observation and surveillance of persons suffering from plague, or suspected of being infected with that disease. Later on in the year subsidiary rules were framed for each port in Bengal and published on the 8th July 1901, the only important change being that, at Balasore and its subsidiary ports, an "infected ship" was ordered to be treated as a "suspected ship."

80. The following abstract shows the working of the Native Passenger Ships Act, 1887, during the four years 1898-99 to 1901-1902:—

YEAR.	Number of long voyages.	Number of passengers.	Number of short voyages.	Number of passengers.
1898-99	229	5,487	1,240	267,417
1899-1900 ...	224	6,805	1,081	189,601
1900-1901 ...	230	8,721	886	178,612
1901-1902 ...	281	13,522	956	181,002

There was a large decrease in the number of passengers on short voyages, and a large increase in those proceeding on long voyages. The Act is reported to have worked satisfactorily during the period.

81. The number of vessels arriving in the Port of Calcutta during the four years 1898-99—1901-1902 was as follows:—

1898-99	... 1,207
1899-1900	... 1,200
1900-1901	... 1,412
1901-1902	... 1,347

In the last of the four years the average tonnage of steamers and sailing vessels, inwards and outwards, was 3,401 tons. The large increase in 1900-1901 was mainly due to the transports chartered for South Africa and China. With the increase in shipping pilotage receipts rose from Rs. 10,33,642 in 1898-99 to

Rs. 11,30,390 in 1901-1902. The number of seamen of all nationalities shipped and discharged rose from 27,024 and 24,672, respectively, in 1898-99 to 37,382 and 31,451 in 1901-1902. The percentage of Europeans shipped and discharged shows a steady decrease, and the Shipping Master has reported that they are being slowly but surely displaced by lascar crews. It was decided by the Government of India in 1901-1902 that the law as it stands does not preclude the employment of Eurasians in merchant vessels on the same terms as Europeans, and during that year 37 Eurasians were shipped under European articles. The death-rate amongst European seamen in the port was in the four years 22·72, 50, 60·66 and 16·51 per mille.

82. The chief casualties occurring within the Port during the period were the collision in 1898-99 of the S. S. *Mecca* with the S. S. *Lindula*, in which the latter was totally lost; the collision in 1899-1900 of the Port Commissioners' despatch vessel *Resolute* with the S. S. *Scindia*, which resulted in the loss of the former with four European officers and 13 or 14 of her crew, and the great fire which broke out in 1901-1902 at the dock jetties and enveloped the steamers *Telena* and *Croydon*, causing some loss of life and material damage to both of the steamers and to the coaling jetties.

83. During 1899-1900 the sanction of the Government of India was received to the amalgamation of the post of Assistant Port Officer with that of Deputy Shipping Master. On the 31st of March 1898, there were in all 52 pilots and 11 leadsmen, and at the end of 1901-1902, 49 of the former and 9 of the latter.

84. The income and expenditure of the Port Trust during the four years was as follows:—

	Income.	Expenditure.
	Rs.	Rs.
1898-1899 ...	62,32,821	65,31,086
1899-1900 ...	66,51,114	66,53,495
1900-1901 ...	73,66,921	70,68,423
1901-1902 ...	76,74,782	73,95,123

In 1901-1902, the receipts at the jetties and at the Kidderpore docks as well as those under the head "Port—Port Approaches" were the highest on record. At the end of the year 1901-1902, the Port Commissioners possessed a total available balance of Rs. 12,11,082, and with this they have wisely decided to establish a revenue reserve fund to guard against a possible falling off in the receipts of future years.

85. In 1898-99 a very serious block in traffic occurred at the Kidderpore docks. A careful enquiry into the matter was made by a representative committee, and the result of their recommendations was that the Port Commissioners obtained the sanction of Government to build more receiving sheds, sidings, and coal-berths, to make the coal jetties continuous, to purchase more wagons and locomotives, to erect another salt golah, to acquire some necessary land, and to increase their staff. The issue of a debenture loan of fifty-three lakhs of rupees to enable the Commissioners to carry out the improvements necessary was sanctioned, and the scheme was energetically taken in hand In 1900-1901, in order to provide special facilities for ships engaged in the coal export trade, a mechanical system of coal-loading, invented by Mr. Beckett of the Bengal-Nagpur Railway, was introduced at the Kidderpore Docks.

86. In 1900-1901, in consequence of unfavourable criticisms on the financial position of the Calcutta Port Trust, and the policy adopted by the Commissioners in dealing with their surplus revenues, the Calcutta Trades Association and the Bengal Chamber of Commerce recommended the appointment of a Commission to consider its present and future management and to draw up a scheme for the more efficient and economical management of its affairs.

The Lieutenant-Governor, while he was not prepared to question the efficiency of the administration of the Port Trust, consented, in view of the unanimous request for an enquiry, to appoint a Commission to make an investigation. The Commission consisted of three representatives from the mercantile community, two from Railway Administrations, the Secretary of the Bombay Port Trust, and two Government officials—one as President and the other as Secretary.

The issues to be decided by the Committee were—

(1) How far could the management of the Port Trust be improved (*a*) with regard to efficiency, and (*b*) with regard to economy.

(2) Should the profits of one part of the Trust property be used to meet the deficits on another, or should they be kept entirely separate.

(3) Should the offices of the Chairman and Chief Engineer be separated, and, if so, what other changes, if any, in the present organization, were desirable.

The Committee submitted its report in March 1901. In regard to the first issue, the report certainly disclosed some imperfections, but disproved the general and sweeping charges of mismanagement brought against the Commissioners in some quarters. Numerous suggestions were made by the Committee with a view to increase the efficiency of the various departments of the Trust. Various proposals were also put forward which, it was estimated, would increase the revenue by about 5½ lakhs of rupees—partly by economy in present expenditure, partly by re-adjustment in existing rates and charges, and partly by increase in rents and miscellaneous receipts. On the other hand, certain additional capital expenditure was advocated. In regard to the second issue, the Commission decided that the operations of the Trust ought to be treated as a whole, and that the contention that each department should be independent and self-supporting could not be maintained. With reference to the third issue, the Commission unanimously recommended that the posts of Vice-Chairman and Chief Engineer should be separated, and this recommendation has been carried out.

87. The port of Chittagong has acquired a new importance by the opening of the Assam-Bengal Railway and the establishment of a steamer service in direct communication with Europe. In view of the difficulty experienced in working the port satisfactorily on its present income, the Government of India were in 1901-1902 moved to amend the Chittagong Port Act so as to admit of the imposition of a river due not exceeding four annas per ton on all goods imported or exported by means of sea-going vessels. A Bill to that effect was submitted for the approval of the Government of India, and has recently been passed into law. Additions to the existing jetty have been made, and estimates have been sanctioned for the construction of a second one. A survey of the approaches to the port and of the river Megna was carried out during the cold weather of 1901-1902, and the operations have since been extended to Cox's Bazar.

88. The trade of the Orissa Ports is now comparatively insignificant, and in view of the continued deficits in the Cuttack and Balasore Port Funds, it was decided in 1901-1902 to make further reductions in the expenditure. A single Port Officer has been appointed for all the Ports, and various reductions have been made in the Light House staff at Shortt's Island.

WEATHER AND CROPS.—CONDITION OF THE PEOPLE.

89. On the whole the period of Sir John Woodburn's administration was one of agricultural prosperity. In 1898-99 crops were good, the outturn of the *bhadoi*, winter rice and *rabi* crops being 94, 105 and 97 per cent. respectively of a normal crop. In 1899-1900 crops were not so good, the *bhadoi* averaging 70 per cent., winter rice 95, and *rabi* 87 of the normal. The year, however, was a prosperous one except in parts of the Chota Nagpur and Orissa Divisions. In the course of the winter it became evident that the failure of the crops in the Ranchi plateau would require the opening of relief works, and test-works were commenced in December 1899.

90. In 1900-1901 the outturn of *bhadoi* was 89 per cent. of a normal crop, winter rice 88 per cent. and *rabi* 81. The year was prosperous, except in the districts of Ranchi and Palamau, and in Angul and the Khondmals, where scarcity prevailed. In Ranchi the total area affected was 3,052 square miles with a population of 492,810 persons. In the district of Palamau famine was declared in only one thana, but in certain others test-works were opened and gratuitous relief given. A good *bhadoi* crop and the favourable prospects of the winter rice enabled all relief works in Palamau to be closed from the

31st August 1900 and kitchens from the 8th September. In Ranchi both works and kitchens were closed on the 15th September. The average daily number of persons employed on test and relief works was in Ranchi 7,225 and in Palamau 1,495. In the former district the average daily number of those receiving gratuitous relief was 7,378, and in the latter 2,097. In both districts money was advanced to cultivators, and to *mahajans* to assist them in importing food-grains. There was some distress in Angul, and specially in the Khondmals subdivision, though the conditions were not such as to warrant the declaration of famine.

91. In 1901-1902 rainfall was generally deficient and badly distributed. In Bihar the deficiency amounted to 20 per cent. and the all-important *hathiya* rains failed entirely. The outturn of the *bhadoi*, winter rice and *rabi* was 90, 75 and 75 per cent. respectively of a normal crop. Disquieting reports were received from the Bihar districts, where it was anticipated that some distress would be felt. In consequence of the apprehension caused by the failure of the monsoon rains, the present Lieutenant-Governor, who was Commissioner of Patna during the Bihar Famine of 1896-97, and who had served on the Indian Famine Commission of 1901, was deputed to visit Bihar in order to confer with the local officers as to the agricultural situation, and to report whether scarcity or famine were to be feared and whether any measures of famine relief would be required. After a careful enquiry, Mr. Bourdillon found the situation much better than it was in 1896-97, and reported that there was no cause for immediate anxiety. His prognostications were verified by the event, and the period between the monsoons passed without any need for unusual measures, except in the districts of Darbhanga and North Bhagalpur. In those two districts work on District Board roads was specially provided in certain selected tracts; and in Bhagalpur much work was provided by private persons on tanks, and some charitable relief on a small scale was also given from funds placed at the Collector's disposal by zamindars.

92. Wages during the period remained for the most part stationary. In a few localities however they showed some rise in consequence of a special demand for labour, as for example in connection with the coal-mining industry and railway extensions.

93. The two most disastrous natural calamities during the administration of Sir John Woodburn were the landslips in Darjeeling and the heavy floods in the Sonthal Parganas and the Bhagalpur district, both of which occurred in 1899. The former in September of that year, which followed on an unparalleled rainfall, caused much loss of life, attended by many pathetic circumstances, and the damage to property was immense. The floods in the Sonthal Parganas and Bhagalpur district, which were simultaneous with the disaster in Darjeeling and were occasioned by the same storm, caused much less damage to property but far greater loss of life. Generous aid was given by the public to the sufferers in both calamities, and efficient measures have since been taken for the protection of Darjeeling.

AGRICULTURE, SERICULTURE AND HORTICULTURE.

94. In 1900-1901 three new experimental farms were started in the Province—one at Chittagong by Government, and the other two on the Hatwa and Tikari Raj Estates, both under the Court of Wards. A variety of useful experiments was carried out on these farms and on those at Burdwan, Dumraon, and Sibpur, the most important being the experiments conducted under the control of the Director of Land Records with selected seed at the Burdwan and Chittagong farms in connection with the alleged deterioration of jute, on which a special report is now awaited by Government. In the four years 1898-1899—1901-1902, Government expended on agricultural experiments Rs. 6,156, Rs. 6,577, Rs. 5,379 and Rs. 4,696, respectively. In addition to this expenditure on experiments under its direct control, the Lieutenant-Governor, in 1901-1902, agreed to grant a subsidy of Rs. 50,000 for three years in aid of the researches undertaken by the Bihar Planters' Association and the Indigo Improvement Syndicate in the hope of improving the cultivation of the indigo plant, and extracting a better dye. Similarly in 1899-1900 a grant was made from

Provincial Revenues towards the cost of a Botanist engaged by the Indian Tea Association to enquire into the natural history of the tea plant. In consequence of the depression of the indigo industry in Bihar caused by the competition of the synthetic dye, the question of the cultivation of sugar-cane as a rotation crop on indigo lands came under discussion. With the object of eliciting accurate information as to the possibility of profitably extending sugar-cane cultivation in Bihar a Committee was appointed in October 1900 with Mr. J. E. O'Conor, Director-General of Statistics, as President, and in February 1901 the members submitted their report. They were of opinion that, even as now conducted, the cultivation of sugar by planters was profitable, and that it would be still more so, if carried on in accordance with the principles of modern scientific agriculture. The report was published for general information, and was largely distributed among those interested in the subject, with the result that a considerable amount of capital has been invested in the cultivation and refining of sugar in Bihar.

95. In 1899 an Act was passed by the Imperial Legislature imposing countervailing duties on imported bounty-fed sugar. During 1901-1902 enquiries were instituted under the control of the Director of Land Records as to the effect of the imposition of these duties on the prospects of the sugar-refining industry in Bengal, and a report on the subject has recently been received by Government, from which it appears that the native industry has not been affected by the countervailing duties.

96. In November 1901 the course of education imparted at the agricultural classes of the Seebpur College was revised, and there is now, instead of a higher and lower class, only one class divided into students of one and two years. The majority of those who have completed their course of instruction have obtained appointments under Government or private employers. Under orders issued by Government in 1901-1902, every alternate permanent vacancy in the post of kanungo in all Divisions except Patna will be given to students of the agricultural classes if duly qualified, and when vacancies occur in posts at the disposal of the Court of Wards, applications from passed students will be duly considered. The passed students are also eligible for appointments in the Canal Department.

97. The usual number of agricultural exhibitions and cattle fairs were held in the Province. To encourage the improvement of cattle-breeding the Government of India intimated that they were prepared to place the sum of Rs. 2,500 annually, for a period of three years, at the disposal of the Government of Bengal for the systematic award of prizes at cattle fairs. From this sum grants were made during 1901-1902 to the Sonepur, Kalimpong, and Suri fairs.

98. In 1898-99 an important departure was made in the management of the sericultural operations carried on in the Province. Previously these operations had been conducted under the immediate control and supervision of the Director of Land Records, Government making a fixed annual grant of Rs. 3,000 for the purpose. Under the new arrangement, the entire management and control of the operations, together with the services of the travelling sericultural overseer, were transferred to an independent committee composed of representatives of the chief silk firms in the Murshidabad district, on their agreeing to spend Rs. 5,000 annually for a period of three years, for the purpose of teaching M. Pasteur's system of rearing silk-worms to the cocoon-rearers of Murshidabad, Rajshahi, Malda, and Birbhum. Government agreed to grant a subsidy of Rs. 3,000 a year in aid of the operations. In 1900-1901, the operations were extended to a new district, Bogra. The efforts of the Committee to promote the production of healthy silk-worms have been attended, except in Birbhum, with successful results, and in 1901-1902, in order to enable the committee to further expand the scope of their operations, and to meet additional expenditure in connection with the erection of new model nurseries at the centres of important silk districts, Government decided to raise its annual grant to Rs. 6,000 during 1902-1903 with the intention of continuing it at the increased rate for two years more.

99. The Rampur Boalia Sericultural School, which was started in January 1898 and which is aided by Government, has done useful work. A good model rearing-house and a mulberry plantation are attached to the school,

and students are sent out on the application of villagers to help them in scientific seed-selection and to combat outbreaks of silk-worm disease. In 1901-1902 it was decided that the primary object of the school should be to train the sons of cocoon-rearers, and in order to adapt the course of instruction given to the needs of boys of this class, their course of training has been reduced to six months, and no educational qualifications are now demanded of them. A redistribution of the District Board scholarships tenable in the school has been made, and these will in future be preferentially awarded to boys of the cocoon-rearer class. Educated students wishing to be trained for the posts of sub-overseer and inspector will, as before, be required to undergo the year's course in the rearers' class.

100. The Royal Botanic Garden at Calcutta and the Lloyd Garden at Darjeeling continued to do useful work. As the result of excessive rainfall in September 1900, the Royal Botanic Garden was flooded and much damage was caused, especially to certain species which are strangers to the Gangetic Delta, and which it will be difficult to replace. In November 1901 a severe storm visited the garden and did much damage, uprooting a number of valuable trees and greatly disfiguring many that were not completely destroyed.

VETERINARY.

101. GREAT progress was made in veterinary matters in the period under review. In 1898-99 there were in all nine veterinary dispensaries in the Province, and by the end of 1901-1902 this number had increased to nineteen. In 1900-1901 the Secretary of State sanctioned proposals for aiding from Provincial funds the District Boards and head-quarters Municipalities of Bengal for the purpose of establishing these dispensaries and the employment of stationary and itinerant assistants. Rules to this end have been framed, and gradual effect is being given to the policy initiated. In 1898-99 the status of the Bengal Veterinary School was raised to that of a College, and the course of instruction there imparted extended from two to three years.

102. The Glanders and Farcy Act received the assent of the Governor-General in Council in March 1899. In 1900-1901 the Act was extended to the Dacca Municipality and to the district of the Sonthal Parganas, where an outbreak of glanders occurred. In December 1901 the Act was also extended to the district of Murshidabad and to the Patna Municipality. During the period various experiments were successfully carried out by the Superintendent of the Civil Veterinary Department and his staff, notably in immunisation with anti-rinderpest serum.

FORESTS.

103. THE total area of forests under the control of Government in 1901-1902 was 13,578 square miles, exclusive of the protected forests in Shahabad, the area of which is not precisely known. Of the above area 12,971 square miles were under the management of the Forest Department, and 607 under that of the Civil Department. State forests in Bengal are of three kinds—reserved, protected, and unclassed. In 1901-1902 the reserved forests comprised an area of 5,963 square miles, the protected forests an area of approximately 3,582 square miles, and the unclassed forests an area of 4,033 square miles, the whole of which latter class is situate in the Chittagong Hill Tracts. A survey on the scale of four inches to the mile of the more valuable State forests was commenced in 1899 by the Imperial Forests Survey Department, and up to the end of 1901-1902, 780 square miles of reserved forests and 193 square miles of protected forests had been surveyed in the Singhbhum and Hazaribagh districts. In 1898-1899 rules were published for the protected forests in Angul, closely imitating those in force in the Khurda Government Estate, and in 1901 revised rules for the Sonthal Parganas protected forests were issued. The total amount of wood extracted from the various forests in 1901-1902 was 7,420,129 cubic feet of timber, and 35,011,806 cubic feet of fuel. Sir John Woodburn took every opportunity of impressing on Forest Officers the necessity for realising that they

LIBRARY

are the agents of a great commercial undertaking, and that as such they are not merely the scientific protectors of an important property, but active exploiters whose business it is to seek and develope markets for the produce ready for use. In this connection he laid great stress on the paramount importance of having for each Division systematic working plans for the exploitation and regeneration of the various forests. By the end of 1901-1902 working plans had been made and sanctioned for 2,537 square miles of reserved forests and 1,844 square miles of protected forests. In July 1899 the levy of a royalty of one anna per maund on *sabai* grass exported from the protected forests in the Sonthal Parganas was sanctioned. The receipts from forests steadily increased during the period under review, and the surplus returned for the year 1901-1902 (Rs. 6,86,729) was the highest on record. Every year the greater part of the surplus is contributed by the Sunderbans division, and in 1901-1902 its contribution was roughly two-thirds of the total surplus.

104. In 1898-99 the Imperial Forest Service staff was, with the sanction of the Secretary of State, increased by two Deputy Conservators and one Assistant Conservator owing to the revenue work and area under the Forest Department having largely increased since the re-organisation. Orders were at the same time issued that one appointment in the second grade of Assistant Conservators was to be transferred to the Provincial Forest Service to create a new appointment of Extra Assistant Conservator in that service. A scheme for the re-organisation of the clerical and menial staff of the department, involving an additional cost of Rs. 797-8 per mensem, was sanctioned, with effect from the 1st April 1901.

105 In view of the threatened extinction of buffaloe, rhinoceros, and bison in the districts of Darjeeling and Jalpaiguri, it has been found necessary to prohibit by Government order the killing, except in self-defence, or capturing of any of these animals in the reserved forests of the two districts named.

106. The damage caused to the several forests by fire during the period under review was singularly small. In March 1901 the Indian Forest Act, VII of 1878, was amended by the Government of India with a view to the enforcement of communal responsibility in case of wilful or grossly negligent incendiarism in forests. Power is given by the Act with regard to "reserves" to suspend the exercise of rights that have been abused and thus to stimulate public feeling to support the efforts of the conservancy administration. This power was extended to "protected" areas. A provision has also been inserted imposing upon persons enjoying the advantages of forest administration the responsibility for giving assistance in suppressing fires and offences without waiting for a formal demand for help.

As a considerable number of fires had of recent years broken out in forests in the territories of the Native States of Orissa and Chota-Nagpur, and spread thence to forests in Bengal proper, the attention of the Chiefs of those States was called by Government in 1900-1901 to the necessity for taking greater precautions for the prevention of such fires.

MANUFACTURES AND MINES.

107. The importance of the jute trade in Bengal is shown by the fact that in 1901-1902 no less than 20,853,772 maunds of the raw commodity, valued at Rs. 12,27,31,775, were exported from Bengal. According to the most recent estimate the average area under jute in a normal year is 2,339,310 acres and the total outturn 7,017,300 bales, of which 500,000 are used in domestic consumption, 2,200,000 sent to mills in the Province, and 4,317,300 exported. Jute is chiefly cultivated in Northern and Eastern Bengal, but in recent years the cultivation of it has spread considerably in the districts of the Presidency Division. The only districts outside these tracts which grow jute to any extent are Bhagalpur, Malda, and Purnea. A little is also grown in Orissa. There are 34 steam mills in Bengal for the spinning and weaving of jute and gunny-bags; of these, 20 are in the district of the 24-Parganas, 5 in the district of Hooghly, and 9 in Howrah. During the last ten years there has been an increase of 10 in the number of jute mills in Bengal, and the number of looms and spindles

has increased by 6,355 and 136,022 respectively. Of late jute pressing has been considerably extended in the Dacca Division in consequence of the erection of new press-houses by Messrs. Ralli Brothers and other firms. As already mentioned under "Agriculture, Sericulture and Horticulture," enquiries are being conducted under the control of the Director of Land Records into the alleged deterioration of jute.

108. The total number of tea gardens in the Province fell from 509 in 1898 to 452 in 1902. That this was due for the most part to amalgamation of gardens is shown by the fact that the area under tea increased during the same period from 130,240 to 135,129 acres. The outturn of tea in pounds in the four years 1898—1901 was—

	lbs.
1898	42,631,019
1899	44,910,932
1900	46,533,255
1901	46,203,980

The various gardens gave employment in 1901 to 168,935 persons. More than half of the gardens in Bengal are in the Jalpaiguri district, and the industry is practically confined to this and the Darjeeling district. The production of tea in recent years has increased so much more rapidly than its consumption that there has been a heavy fall in prices, and in 1901 the tea industry passed through a critical stage: prospects have however since improved. As stated under "Agriculture Sericulture, and Horticulture" the Indian Tea Association engaged a Botanist in 1899-1900, to enquire into the natural history of the tea plant and the best methods of manufacturing tea, and in aid of these researches a grant was made from provincial revenues.

109. A comparison of the figures of the outturn of indigo in 1897-98 and 1901-1902 is sufficient to show the decline of the industry in Bengal during the period under review. In 1897-98 the outturn amounted to 97,757 maunds and in 1901-1902 to only 61,402 maunds. As further evidence of the disastrous results of the competition of the synthetic dye, it may be noted that the gross outturn of indigo in 1901-1902 was valued at 100 lakhs, whereas ten years previously the gross outturn was estimated to be worth 150 lakhs. As already stated elsewhere, researches have been carried on, subsidised by Government, during the period under review with the object of improving the plant and its outturn of dye.

110. The silk production of Bengal, though in a declining state, is still very large. The total production of raw silk in the Province is estimated to be about $3\frac{1}{2}$ million pounds, of which about 500,000lbs. are exported by European merchants to foreign countries, 800,000lbs. are utilised in the Province almost entirely by village weavers for manufacturing piecegoods of various kinds, 250,000lbs. are transported along the coast to other provinces, and 2,000,000lbs. are exported to other provinces by road, river, and rail. It is difficult to say exactly how far foreign silks have ousted the products of the native loom within the last few years, but there is no doubt that the use of foreign silks has increased and that the trade is being pushed. Reference has been made elsewhere to the work of the Silk Committee and of the sericultural school at Rampur Boalia.

111. The quantity and value of stick and shellac exported by sea from Bengal during the four years 1898-1899—1901-1902 was—

	Cwt.	Value. Rs.
1898-1899	180,748	86,12,880
1899-1900	237,600	1,13,05,571
1900-1901	223,191	1,04,90,320
1901-1902	155,313	95,24,949

There is still an active demand for shellac, but lac-dye has been almost superseded by European dyes. The dye, which at one time used to sell at twice the price of shellac, has now a nominal value of about Rs. 10 a maund.

112. The increasing imports of foreign sugar into Bengal and their effect on the native refining industry are shown by the following figures:—

	Imports into Calcutta by sea in maunds.		Exports from Calcutta by sea in maunds.	
	Refined sugar.	Unrefined sugar.	Refined sugar.	Unrefined sugar.
1898-1899	1,496,679	417,672	62,093	29,928
1899-1900	1,149,374	477,097	56,907	37,976
1900-1901	2,061,614	537,845	38,886	19,625
1901-1902	2,275,473	714,429	41,637	24,367

113. The total area under tobacco in Bengal is now estimated at 576,100 acres, of which about 194,000 acres are in the Rangpur and 90,000 in the Jalpaiguri district. The total weight of the tobacco imported and exported during the past four years has been as follows:—

	Imports.	Exports.
	Mds.	Mds.
1898-1899	631,405	1,298,640
1899-1900	722,869	1,382,588
1900-1901	741,426	1,383,390
1901-1902	756,808	1,479,970

114. The manufacture of saltpetre is extensively carried on in Bihar, about 10,000 tons of refined saltpetre being produced there annually. The total quantity of saltpetre exported from Calcutta in 1901-1902 was 349,522 cwts. valued at over Rs. 35,00,000.

115. The cinchona plantations continued to do valuable work. In 1899 a fresh extension of about 900 acres was commenced in the Dumsong forest block, situated about 10 miles north-east of Kalimpong, near the junction of the Rungpo and Teesta rivers on the borders of Independent Sikkim. In 1901-1902 the outturn of the Mungpoo factory was 10,010 lbs. of sulphate of quinine and 3,424 lbs. of cinchona febrifuge.

116. The Factories Act has continued to work satisfactorily during the period. At the beginning of 1898 there were 167 factories under the operation of the Act, and by the end of 1901 this number had increased to 242. In 1901 over 200,000 persons were employed each day in the several mills. In the four years there were only five prosecutions instituted under the Act; and the number of accidents occurring was 553 in 1898, 535 in 1899, 462 in 1900, and 548 in 1901. The majority of these accidents were only of slight nature.

117. In most of the factories in the district of the 24-Parganas the mill-owners provide good quarters for the operatives. The lines for mill-workers at the Serampore Cotton Mills are also well spoken of. Many operatives however live in insanitary *bustees*, and during 1901 the local officials were instructed to take proceedings under the provisions of the Municipal Act in those *bustees* in the Burdwan and Presidency divisions where the need for sanitary reform was most apparent.

118. By far the most important of the mineral industries in Bengal is that concerned in the raising of coal. How great the growth of the industry has been in recent years is shown by the figures of output for the four years 1898—1901, which were as follows:—

	Tons.
1898	3,622,090
1899	4,035,265
1900	4,978,492
1901	5,487,585

The large increase in 1900 was the result of the high prices ruling in England in that year, but apart from this the figures above show clearly that the Bengal coal trade is a vigorous and growing industry.

119. Similarly the mica industry has undergone great developments of recent years, and in 1901 the output was 870 tons, whereas ten years previously the industry was almost non-existent. The rules for the grant of

prospecting licenses and mining leases for mica in Bengal were revised in April 1902. The important changes introduced in the rules were:—

(1) The levy of a royalty in the case of prospecting licenses at the rate of 5 per cent. on the sale value of mica.
(2) The abolition of the system of putting up leases of mica mines to auction and provision for restricting operators to approved methods.
(3) The raising of the maximum period of leases to 30 years.
(4) The grant of power to lessees to relinquish their grants during the currency of their leases.

120. At Barakar a considerable expansion in the iron trade is going on, the output in 1901, being 43,629 tons.

121. In 1901 a Bill for the regulation and inspection of mines was passed into law as Act VIII of 1901, and shortly afterwards a Mining Board was constituted for Bengal. During 1899-1900 revised rules were issued by the Government of India regulating the grant of exploring and prospecting licenses and mining leases.

TRADE.

122. In the two years preceding 1898-99 commercial relations in India generally had felt the effects of famine and plague. With the return of ordinary conditions after the spring and autumn harvests of 1898, prices of food-grains resumed their normal levels, the money market recovered itself, arrears of Government revenue were paid, trade was resumed, credit was restored, and money again circulated freely. The course of Indian trade from that time onwards continued on the whole prosperous and promising until the third quarter of the year 1899-1900, when after a more or less complete failure of the south-west monsoon famine re-appeared over large regions of Central and Western India and part of the Punjab. Conditions grew rapidly worse when the winter rains also failed (except in Northern India), and the second half of 1899-1900 presented a close resemblance to the corresponding period of 1896-97 in the outbreak of widespread distress following drought, the recrudescence of plague, the disturbance of the money market, and the rise in the rate of discount which followed on the withdrawal of funds to feed the famine-stricken. The strain however was not so severely felt as in 1896-97, the rate of discount never rose so high, and the volume of trade was larger than in 1898-99, much of this being due to the flourishing condition during the year of trade and industry in the United Kingdom, in Europe generally, and in the United States, to a general advance in prices, and partly also to the steadiness of exchange.

123. The famine continued through the first half of 1900-1901, and left its mark upon the trade of the latter year. For the first six months trade was depressed, and its revival after September was not sufficiently vigorous to efface the traces of famine so apparent in the earlier part of the year. Prices of wheat and rice continued on a high level, and the price of cotton was in effect prohibitive to the continuance of spinning in the face of a market for yarn depressed by excessive stocks in China. The continued presence of plague in epidemic form also operated in embarrassment and hindrance of trade. The tea trade experienced an acute crisis from over-production and consequent fall in prices. The indigo industry continued seriously disturbed by a heavy fall in prices following on the competition of the German synthetic dye. The sugar industry suffered from scarcity of the raw material owing to an unfavourable season and from competition of foreign sugar. All manufacturing industry was affected more or less by the high price of coal, although this brought its own compensation in the increased production and consumption of Indian coal. The agricultural conditions of the country were such as to reduce materially the exports of food-grains, cotton, and oilseeds. In opium, jute, and the manufactures of jute however, and also in hides and skins there were some compensations, although the last item may be regarded as salvage from the wreck of the famine. There were also larger importations of food-grains. But although in the first half of the year both imports and exports were

restricted, in the second half there was a great recovery. The monsoon, though not good in some parts of India, was quite favourable in Burma and over a vast region in Northern India. The good harvests reaped were sold at a high level of prices, so that while the cultivators in the famine-stricken area were struggling with adversity, those elsewhere were more than ordinarily well off.

124. In 1901-1902 the traces of the previous unfavourable period were in great measure effaced, and with the return of fairly good seasonal conditions, on which depend agricultural operations, trade, both in imports and exports, exhibited a great increase. The only really significant reductions were in the import of food-grains and in the export of hides and skins: the former are not necessary in an ordinary year, and the latter indicates a return of agricultural stock to normal conditions. The principal features of the export trade were renewed activity in the shipments of food-grains and oliseeds and large exports of cotton and jute and of the manufactures of the cotton and jute mills. The shipments of tea, however, declined, as did also those of indigo, opium, and lac.

125. Bengal was, however, fortunate in escaping the adverse influences which depressed the trade of India as a whole during the period under review, and this is apparent from the general results summarised in the subjoined table, which exhibits the value in rupees of private merchandise, excluding treasure, imported into, and exported from, Bengal by the four principal channels of trade.

	Imports.	Exports.
	Rs.	Rs.
1898-99		
With other countries by sea ...	27,94,90,056	45,95,28,470
,, ,, land ...	1,53,94,926	1,29,37,300
With other provinces by sea ...	3,89,80,463	5,40,86,803
,, ,, land ...	20,30,03,921	14,93,43,757
Total ...	53,68,69,366	67,58,96,332
1899-1900		
With other countries by sea ...	29,75,88,460	50,26,25,903
,, ,, land ...	1,59,78,498	1,26,09,818
With other provinces by sea ...	3,78,01,094	6,68,79,171
,, ,, land ...	23,10,08,983	18,68,92,487
Total ...	58,23,77,035	76,90,07,379
1900-1901		
With other countries by sea ...	31,86,91,468	55,14,44,400
,, ,, land ...	1,69,13,362	1,31,74,655
With other provinces by sea ...	4,60,00,076	7,16,29,565
,, ,, land ...	21,85,86,178	19,52,91,395
Total ...	60,01,91,084	83,15,40,015
1901-1902		
With other countries by sea ...	32,81,96,044	55,38,31,158
,, ,, land ...	1,68,72,274	1,21,47,796
With other provinces by sea ...	5,04,80,982	5,95,48,193
,, ,, land ...	21,85,06,005	18,46,19,722
Total ...	61,40,55,305	81,01,46,869

126. The plague scare in 1898 did not appreciably affect trade in Calcutta, nor did the failure of the crops in 1899-1900, which was far more extensive and serious to the country as a whole than in 1896-97, extend (except in parts of the Chota Nagpur Division) to the Province of Bengal. Fluctuations are noticeable in the details, and the course of the trade in food-grains was disturbed; but there was no want of activity and enterprise in trade operations, and the total values of the trade, imports and exports, exhibit a marked progress from year to year, with the single exception of the exports in 1901-1902. The decline in this year was due to a decrease of 121 lakhs in the

exports coastwise and of 107 lakhs in the exports by land to other provinces. In both cases the large decrease was mainly due to smaller despatches of grain and pulse by sea to the Madras Presidency and by rail to the United and Central Provinces. The decline denoted a return to normal conditions from the unusual demands caused in the preceding periods by the failure of the crops. The total value however, though smaller than that of the immediately preceding year, was larger than the value in the two previous years. The foreign export trade was active in 1898-99, but this is not apparent from the total value owing to the small exports of raw jute of which there was a short crop.

127. Among the principal articles of export, it may be said that Bengal has almost monopolies in respect of coal, jute and the manufactures of jute, lac, saltpetre, and raw silk, while in others it has a large or preponderating share such as opium, indigo, rice, hides and skins, and tea. The coal industry of Bengal has made rapid progress, the output having increased from about 3½ million tons in 1898 to nearly 5½ million tons in 1901, and now gives employment at the mines to nearly 80,000 persons. The exports by sea to other parts of India have risen within the same period from less than one million to over 1⅓ million tons.

128. The value of the jute industry to the province may be gauged by the fact that an area of well over two million acres is cultivated with that crop, and that the nominal capital in the 34 mills with 327,826 spindles, and 15,986 looms aggregates 7 crores of rupees. The manufacturing industry gives employment to 113,493 persons and the value of the annual produce is estimated to be eleven-and-a-half crores of rupees. The area under tea in Bengal in 1901 was 135,129 acres, belonging to 452 plantations. The industry gives employment to 168,935 work people, and the nominal capital is over 3½ crores of rupees, exclusive of the large capital registered in the United Kingdom. Profits have been much reduced by over-production and the fall in prices.

129. The important indigo industry of Bihar received a heavy blow on the production of cheap synthetic indigo and has declined with alarming rapidity. The reported area in Bihar and Bengal fell from 512,100 acres in 1898-99 to 318,200 acres in 1901-1902, and the yield from 74,321 to 47,066 cwt., but this is partly attributable to very unfavourable seasons. The sugar industry, too, has declined, the reported area falling from 861,100 to 811,700 acres. This is partly due to seasonal conditions and to the estimates for the earlier years being probably exaggerated, but the large imports of bounty-fed beet sugar may have reduced cultivation.

PUBLIC WORKS DEPARTMENT—ROADS AND BUILDINGS.

130. CONSIDERABLE changes were made during the period under review in the constitution of the Public Works Department. The insufficiency of the scale of Engineers sanctioned for the Province had been for some time apparent, and on a representation to the Government of India the sanctioned cadre was in 1899-1900 raised from 51 to 59.

131. To give effect to the proposals made by this Government for the better supervision of local as well as provincial and imperial works executed through the agency of District Boards, the Secretary of State sanctioned, during 1900-1901, two additional Superintending Engineers for the Province. This admitted of the Public Works circles and Inspectors of Works' charges being re-arranged. There were originally seven Inspectorships of Works. Four of these charges were held by Superintending Engineers and three by Executive Engineers. Under the new arrangement there are now ten Inspectorships of Works—seven held by Superintending Engineers and three by Executive Engineers. To secure a more convenient and equable distribution of work among these ten charges or circles, which are conterminous as far as possible with the Commissioners' Divisions, a readjustment of the various districts was made.

132. In consequence of the damages caused in Darjeeling by the cyclonic storms which occurred in September 1899, it was found necessary to form a

temporary Public Works division called the "Special Repairs Division, Darjeeling." The repairs having been practically completed by the end of the year 1901-1902, the division was abolished with effect from the 25th April 1902.

133. During 1901-1902 an alteration was made in the system of recruiting Apprentice Engineers and Upper Subordinates from the Civil Engineering College, Sibpur, and the Bihar School of Engineering, it being decided that the Upper Subordinate establishment of the Public Works Department shall in future be recruited from both sides of the college and from the Bihar School of Engineering. Other important changes were the abolition of the post of Under Secretary in the Establishment and Marine Branches, and the appointment in his place of an Assistant Secretary, with effect from the 10th April 1899; also the appointment of an Inspector of Electricity for four years, with effect from the 1st April 1898, which period was subsequently extended for a further term of four years.

134. During 1899-1900 a change in the system of carrying out Government works by the agency of District Boards was introduced in certain districts which accepted the terms proposed by Government for remunerating the District Board staff for the work done. The terms provide that a District Board may claim payment for the services of its establishment on provincial works in the form of a definite allowance of 15 per cent. on all estimates, one-third of which may, with the joint concurrence of the Inspector of Works and the Commissioner of the Division, be paid to the District Engineer.

135. During 1901-1902 the question of providing for a more efficient professional control over the civil works undertaken by District Boards was decided by the revision of the rules under clauses (9) (*l*) and (*m*) of section 138 of the Bengal Local Self-Government Act, so as to admit of an increase of the control exercised by the Inspector of Works, the enhancement of the Inspector's influence with the Boards, the maintenance of a standard of qualification for the post of District Engineer, and the establishment of a closer audit of accounts.

136. The expenditure by the Public Works Department during the four years 1898-99—1901-1902 was as follows:—

	1898-99.	1899-1900.	1900-1901.	1901-1902.
	Rs.	Rs.	Rs.	Rs.
Imperial works ...	8,40,436	10,32,893	10,74,999	26,56,099
Provincial works ...	32,88,791	39,13,940	38,80,338	43,70,888
Excluded local funds ...	11,998	13,802	15,035	19,886
Contributions ...	2,64,431	2,14,475	2,18,426	1,02,360
Total ...	44,05,656	51,75,110	51,88,798	71,49,233

The most important of the works undertaken during the period were the construction of the new Presidency General Hospital and of the Military and Foreign Secretariat buildings, the improvement of communications in the Duars, the opening up of feeder roads in connection with railway systems, the special repairs carried out in and near Darjeeling, and the construction of numerous munsifs' courts and residences.

137. Of the works executed on behalf of the Government of India, the most important, in addition to the Military and Foreign Secretariat buildings mentioned above, were the construction of an Imperial Meteorological office, with quarters for the Assistant Meteorological Reporter, in the grounds of the Alipore Observatory, the adaptation of "Hastings House" at Alipore as a residence for Native Chiefs, who may be invited to Calcutta by the Government of India, the construction of a third pontoon at the Sulkea Salt Golas, and the improvement of the Metcalfe Hall which was taken over by the Government of India for the Imperial Library.

138. Of the military works undertaken, the most important were those in connection with the establishment of the Ordnance Proof Department at Balasore, the construction of new quarters for the military students at the Medecal College, Calcutta, and the improvement of the first section of the Lachen road from the Teesta suspension bridge to the Rungpo junction.

139. Turning to provincial works, by the end of 1901-1902 the principal block of the European General Hospital, Calcutta, the nurses' quarters and the

main kitchen had been completed at a total cost of Rs. 10,22,763, and considerable progress has been made since the close of the year with the various subsidiary buildings. Other "Medical" works were the construction of a surgical ward and hospital at the Eden Sanitarium, Darjeeling, the extension of the operating theatre at the Medical College Hospital at Calcutta, the completon of a leper asylum at Gobra, and additions and improvements to the lunatic asylum at Berhampore with a view to its conversion into a central lunatic asylum.

140. The Collectorate buildings at Rangpur and Monghyr received considerable additions, and the one at Bogra was reconstructed. Improvements were made in the cutcherry buildings of the Deputy Commissioner of Jalpaiguri; and several collectorate record-rooms were fitted with iron racks. Subdivisional offices were built or in progress at Gaibanda, Madaripur, Thakurgaon, Gumla and Phulbani; and a court-house was erected for the City Magistrate of Patna. Even greater activity was displayed in the construction of civil court buildings and munsifis. A new civil court building at Rangpur and a new Judge's court at Mymensingh were constructed; and at the end of 1901-1902 a scheme, estimated to cost Rs. 44,394, was sanctioned for additions and repairs to the existing court buildings at Monghyr. Munsifis were completed or under construction at Nilphamari, Jamalpur in Mymensingh, Bogra, Narayanganj, Satkania, Patúa, Thakurgaon, North Raojan, Madaripur, Bagirhat, Satkhira, Malda, Jamui, Fatikcherry, and Buxar. To keep pace with the growing number of munsifis, residences for munsifs were built at several places, and during the period 18 were completed and 12 more were in progress. Houses were built or in progress for the Collector and District Superintendent of Police of Bogra, the District Superintendent of Police, Mymensingh, the Civil Surgeon of Dinajpur and the Subdivisional Officers of Serampore, Feni, Brahmanbaria, Chandpur, Gumla, and Madhubani. To secure the provision of greater jail accommodation, which is much needed, additions and alterations were carried out in several of the jails. Subsidiary jails were completed or in progress at Narayanganj, Netrakona, Chandpur, Gumla, and Phulbani. Important work in connection with the water-supply was executed in the Mymensingh, Midnapore, and Berhampore jails. New barracks were constructed for the military and reserve police at Dacca and for the armed police at Calcutta. Under "Education" a new and enlarged building was erected for the Bihar School of Engineering. The zilla school building at Mymensingh, which had been destroyed by the earthquake, was reconstructed; and various additions and improvements were made to several of the schools scattered over the Province. Under "Miscellaneous" a natural history museum was under construction in the Botanic Garden, Darjeeling, and the pilgrim camp at Chittagong was rebuilt. Very extensive damage having been caused to the buildings, roads, and drains within the Darjeeling Municipality owing to the cyclonic storm which visited the district in September 1899, a Committee was appointed by Government for the purpose of suggesting measures calculated to prevent the occurrence of landslips in Darjeeling in the future. In accordance with one of the suggestions of this Committee, it was decided that Government should take over temporarily the entire charge of all the roads, bridges, and drains which were under the control of the Municipality. For this purpose a new Public Works Division, called the "Darjeeling Special Repairs Division," was formed, and during the year 1899-1900 Rs. 89,675 were expended in the division on roads, drainage, and protective works. The work was continued during the two following years, and practically completed by the end of 1901-1902 at a total cost of Rs. 7,60,000. As already stated, the division was abolished with effect from the 25th April 1902. In the Darjeeling Division very considerable restoration work had to be carried out in consequence of the cyclone. During 1899-1900 Rs. 3,40,000 were expended on the repair and restoration of Public Works roads in the district, and in 1900-1901 Rs. 6,18,000 were similarly spent. The restoration work was completed during 1901-1902 at a total cost of Rs. 10,43,000. Nine suspension bridges were also reconstructed by the Public Works Department, in place of those constructed by the Darjeeling Road Cess Committee and destroyed by the cyclone, at a cost of Rs. 2,10,000, of which the Road Cess Committee contributed Rs. 1,00,000. The most important of the other communication works carried out during the period were the construction

of feeder roads, especially in the Jalpaiguri Duars, and of famine relief roads in the district of Nadia.

141. A prominent feature of the period has been the extension of electric power. In Calcutta electric-traction has been substituted for horse-traction over all the tramways, and electric lights and fans have been generally introduced into private houses and offices. In January 1898 the Darjeeling Municipality received permission under the Bengal Municipal Act to instal and use a system of electric lighting for their streets and roads, and subsequently power to provide the public with the current was given by the extension to the town of the Calcutta Electric Lighting Act of 1895. Lastly a license has been granted to the Dacca Electric Light Trustees for lighting the main streets of the town with electricity, for which purpose a handsome donation of Rs. 4,56,000 was made by the late Nawab Sir Ahsanullah Bahadur.

RAILWAYS AND TRAMWAYS.

142. THE main trunk lines and their branches in Bengal are under the direct administration of the Government of India, and only a few short branches and light railways, undertaken by local private enterprise, are under the control of the Government of Bengal.

143. At the end of the year 1901 the total railway mileage of the Province was 4,040 miles, of which no less than 1,064 miles were added during the four years 1898—1901. The additions made in each of the four years were as follows:—

	Standard gauge.	Metre gauge.	2′-6″ gauge.	Total.
1898	... 345	76	35	456
1899	... 218	93	...	311
1900	... 43	193	19	255
1901	... 2	30	10	42

Nearly the whole of the added mileage on the standard gauge in 1898 was contributed by the Bengal-Nagpur Railway: of the additions to the same gauge in 1899 125 miles were on the Moghulsarai-Gaya line and 79 on the Lakhisarai-Gaya line.

The additions to the metre gauge in 1900 were distributed over the Brahmaputra-Sultanpur Railway, the Bengal-Duars Railway, and the Tirhut State Railway. The most important event of the period was the completion of the Bengal-Nagpur Railway to Howrah at the end of 1901. At the end of 1901-1902, 401 miles of railway in extension of the main lines were under construction—285 on the standard and 116 on the metre gauge—the principal lines under extension being on the Bengal-Nagpur and East Indian Railway systems.

144. The light railways and feeder lines which are administered by the Government of Bengal are—

		Miles.
(1)	Darjeeling-Himalayan Railway	... 51
(2)	Deoghar Railway	... 5
(3)	Tarkessur-Magra Tramway	... 31
(4)	Howrah-Amta	... 29
(5)	Howrah-Sheakhalla	... 20
(6)	Ranaghat-Krishnagar	... 20
	Total	... 156

There is practically no goods traffic on any of these lines except on the Darjeeling-Himalayan Railway. The most successful of the lines during 1901 were the Darjeeling-Himalayan and the Howrah-Amta. Three failed to return 4 per cent. A further Light Railway from Bukhtiarpur, a station on the chord line of the East Indian Railway, to Bihar, the head-quarters of an important subdivision in the Patna district, 18¾ miles in extent, is under construction, and a concession has been granted for an extension of the Howrah-Amta Light Railway.

145. In April 1899 a Committee was convened to consider what was known as the Calcutta Central Railway project, which had been put forward by a private Syndicate and contemplated (1) a permanent road and railway bridge to carry

four lines of rail over the Hooghly at the place where the existing floating bridge is now, (2) a central passenger station at Howrah, and (3) an elevated junction railway to unite the East Indian and Eastern Bengal Railways.

146. The Committee completed its deliberations in March 1901. Their conclusions were that a railway bridge at Howrah, with a central station at Calcutta, would be a great convenience; but that the cost of it was enormously underestimated by the Syndicate; that the methods proposed by the Syndicate for financing even the smaller scheme (omitting the large central station) were inadmissible; and that therefore the project, if undertaken at all, should be undertaken by Government as an important contribution to the conveniences of the Empire, irrespective of financial considerations. The Committee's report and recommendations were fully considered by the Local Government in the light of all the facts recorded during the previous fifty years concerning the question of bridging the Hooghly and constructing a central railway station in Calcutta. The Committee advanced no evidence to prove that a second railway bridge is required at Howrah now or in the near future. The opinions at which the late Lieutenant-Governor arrived were these:—

(1) A railway bridge below Naihati is not at present required: when one is required, it should not be built below Cossipore. The construction of any bridge on piers in the stream at or near Howrah (whether road or railway bridge) would be an experiment so dangerous to the shipping interests of the port that it would not be justified unless traffic could be served by no other reasonable alternative.

(2) The plans for railways from the west and north-west of Calcutta should be prepared with this in view.

(3) The development of goods traffic *viâ* the Hooghly Jubilee Bridge to and from the Kidderpore Docks, for both exports and imports, should be encouraged by all reasonable and practicable means.

(4) The use of Sealdah as a passenger station from and to Upper India should be carefully developed, and all concentration of traffic at Howrah, passenger or goods, should be lessened by every practicable means. Another and more central railway station in the heart of Calcutta is not required, it would add to the grave congestion of the area, and could not be made remunerative.

The conclusions of the Committee as well as those above recorded by the Local Government were submitted for the consideration of the Government of India. The Government of India replied that, in view of the opinions expressed by the Local Government, in which the Government of India generally concurred, and of the fact that the scheme had not received the support of those most interested in its execution, the Calcutta Railway Syndicate had been informed that their offer to form a Company to undertake the works proposed could not be entertained on the terms suggested. The Government of India also agreed that there is no immediate urgency for a second railway bridge near Cossipore.

147. During 1900-1901 a Committee sat to consider the following questions:—

(1) The entrance of the Bengal-Nagpur Railway into Jherriah.

(2) The relief of congestion of traffic in the lower section of the East Indian Railway, and

(3) The provision of an independent access to Calcutta for the Provinces of Agra and Oudh.

The Committee reported that—

(1) The Bengal-Nagpur Railway should be allowed free entrance into the Jherriah coal fields.

(2) Additional lines were not necessary for the relief of congestion on the East Indian Railway, which was due to other causes, and

(3) A line should be constructed from Gaya to connect with the Bengal-Nagpur Railway so as to afford an alternative route to Calcutta for Northern India.

LIBRA

IRRIGATION.

148. THE most important work taken up in connection with irrigation in the Province during the period under review was the construction of the Tribeni and Dhaka canals in the district of Champaran. The estimate for the former amounts to Rs. 37,91,789, and that for the latter to Rs. 2,93,145, both being chargeable to the Imperial grant for Protective works. The Tribeni canal when completed will be 60 miles long and it will irrigate 114,000 acres of *kharif, rabi*, and hot-weather crops. The Dhaka canal with its two branches will be 11 miles in length, and will irrigate 13,500 acres of *kharif* and *rabi* crops. In the South-Western Circle, estimates aggregating Rs. 5,17,093 were sanctioned for improving the *bhil* route between the rivers Kumar and Madhumati from Khulna to Madaripur, in order to make it navigable for steamers during the rains. In the Orissa Circle the Dudhai canal for the irrigation of spring rice in the tract of country lying between the Brahmini and Khursua rivers was sanctioned in 1899-1900 at an estimated cost of Rs. 81,797, chargeable to Provincial funds. The length of the canal in eight sections will be $46\frac{2}{3}$ miles, and it will irrigate 11,555 acres.

149. The most important matters in connection with embankments that came under the consideration of Government during the period were the scheme for a retired line of embankment on the Hijili sea dyke at Chandpur in the district of Midnapore, which was sanctioned in June 1900 at an estimated cost of Rs. 93,348, and the question of the Bhagwangola retired line in the district of Murshidabad. On the latter subject which had engaged the attention of Government for some years, it was decided in 1900-1901:—

I.—To close the gap in the embankment on the Gobra Nadi.

II.—To make a drainage channel of 100 feet base connected with the Gobra Nadi.

III.—To open a channel of sufficient dimensions below the new sluice built in the retired line.

Orders were also issued to abandon the portion of the embankment between the new Bhagwangola retired line and the north-west corner near the 69th mile stone in accordance with the provisions of the Embankment Act.

150. The contract for the maintenance of the embankments in the Saran district was renewed for a further period of 20 years, with effect from the 1st of April 1900, and proposals for the renewal of the contract for the maintenance of the embankments in the Muzaffarpur, Champaran, and Midnapore districts were under consideration. In the schedules of the Orissa embankments as approved by Government in 1894, the embankments were divided into five classes. In 1897-98 the Superintending Engineer proposed to revise the schedules and to show in them only the embankments to be maintained by Government, dividing them into two classes, viz., A—embankments maintained as part of the canal works, and B—embankments maintained as agricultural works. These two lists were approved in March 1902, the classification being made subject to any modification that may hereafter be found necessary.

151. The areas irrigated by the canals and the water-rates realized during the period in question are shown below:—

YEAR.	ORISSA CANALS.		MIDNAPORE CANAL.		SONE CANALS.		EDEN CANAL.	
	Area irrigated.	Water-rates.	Area irrigated.	Water-rates.	Area irrigated.	Water-rates.	Area irrigated.	Water-rates.
	Acres.	Rs.	Acres.	Rs.	Acres.	Rs.	Acres.	Rs.
1898-1899	194,847	2,72,382	76,578	1,07,554	440,796	9,29,016	29,757	28,333
1899-1900	200,828	2,67,083	72,105	1,27,730	464,093	9,70,928	27,551	25,842
1900-1901	203,540	2,87,812	80,330	1,18,920	432,413	10,39,368	26,789	26,540
1901-1902	201,498	2,39,035	82,134	1,24,786	557,494	10,69,080	28,141	27,806
Total ...	800,713	10,66,312	311,147	4,78,990	1,884,796	40,08,392	112,238	1,08,521
Average ...	200,178	2,66,578	77,787	1,19,747	471,199	10,02,098	28,059	27,130

FINANCE.

152. THE receipts and expenditure which are incorporated in the general accounts of the Government of India, and which pass through the Bengal books, are classified under three sections—Imperial, Provincial, and Local. The financial settlement which was in force during the whole term of Sir John Woodburn's administration was made in March 1897, and came into operation from the 1st April of that year. As this settlement was originally for five years, it would in the ordinary course have ended on the 31st March 1902, but for special reasons it has been extended for two years. Under this arrangement the only heads of revenue which have been reserved as wholly Imperial are Opium, Salt, and Customs duties. The receipts and expenditure of the Eastern Bengal State Railway, one-half of the net revenue of which was assigned to this Province under the preceding settlement, has also been fully imperialized. Other heads of revenue, except Provincial rates, are divided between Imperial and Provincial in fixed proportions, the Imperial share under Land Revenue being three-fourths, that under Stamps one-fourth, and that under Excise, Assessed Taxes, Forest, and Registration one-half. A few items of receipts under Superannuations, Stationery and Printing, and Miscellaneous have also been retained as Imperial. The rest of the revenue and receipts have been provincialized, and these are included in Provincial and Local sections, the principal sources of income for the latter being road and zamindari dâk cess under "Provincial Rates," pounds under "Police," ferries under "Civil Works," and a few items under "Miscellaneous."

153. Similarly on the expenditure side the entire charges under Assignments and Compensations (except *Malikana*), under Opium (including cost of production), and under Salt, Ecclesiastical, Territorial and Political Pensions, Stationery for Central Stores, Protective Irrigation Works, Railways, and Military Works with their receipts, are Imperial. The charges in respect of collection under the remaining heads of revenue (except Land Revenue, Customs, and Provincial Rates) are divided between Imperial and Provincial in the same proportion as the receipts under these heads, while a few items of expenditure of the Civil Departments, such as Civil Offices of Account and Audit (except Local Audit) under "General Administration," Political Officer in Sikkim under "Political," Superior staff of the Veterinary Department, Census, and a few other items under Scientific and other Minor Departments, and a few of the Miscellaneous Civil Charges have been retained as Imperial. The rest of the charges, except Surveys and Settlements in North Bihar which are Imperial, have been made over to Provincial and Local, except Refunds of Revenue heads which are divided in the same way as their receipts.

154. This settlement was based upon the assumption that, taking one year with another, the sum required by the Government of Bengal to meet the reasonable demands of the Province on heads of expenditure classed as Provincial (Proper) was Rs. 4,43,49,000, and as the average annual income assigned as above was estimated by the Supreme Government in March 1897 at Rs. 4,57,68,000, the difference of Rs. 14,19,000 was the sum which the Local Government was required to hand over to the Imperial Exchequer every year, the Province being thus left with an estimated income and expenditure exactly equal. Under this arrangement the Imperial Government take nearly three-fourths of the revenue and receipts realised in this Province, while more than half the expenditure is passed on to Provincial and Local.

155. In 1898-99 the administration of the South-Lushai Hills was transferred from Bengal to Assam with a surrender of Rs. 3,75,000 from the assigned revenues, while in 1901-1902, the Statistical Department of the Government of Bengal and the Provincial Museum were taken over from Provincial with a further deduction of Rs. 34,000 from the Provincial assignment. In 1898-99, however, a free grant of Rs. 17,00,000 was made from the Imperial Revenues in partial restoration of the large sums which had been spent from the Provincial Revenues on famine relief in the preceding two years, and which had reduced the working balance at the commencement of that year to Rs. 9,22,000, *i.e.*, less than one-half the prescribed minimum balance of 20 lakhs. In 1902-1903 another grant of Rs. 18,00,000 was made to Provincial, of which

Rs. 10,00,000 was to be a recurring grant, to carry out some of the pressing reforms recommended by the Education Commission, and the balance to be employed for civil works, chiefly for the construction of a pathological block and a surgical ward in connection with the Medical College Hospital.

156. Allowing for all these adjustments, the revenue receipts and expenditure in the five years 1898-1899 to 1902-1903 have been as below:—

		Imperial.	Provincial.	Local.	Total.
		Rs.	Rs.	Rs.	Rs.
1898-99 ...	Receipts ..	15,20,77,000	4,74,76,000	67,06,000	20,62,59,000
	Contribution	...	1,66,000	9,93,000	...
	Expenditure	4,47,65,000	4,44,54,000	75,06,000	9,67,25,000
	Contribution	...	9,93,000	1,66,000	...
1899-1900	Receipts ...	16,96,08,000	4,73,90,000	69,17,000	22,39,15,000
	Contribution	...	43,000	12,35,000	...
	Expenditure	4,90,35,000	4,54,97,000	78,76,000	10,24,08,000
	Contribution	...	12,35,000	43,000	...
1900-1901	Receipts ...	18,25,24,000	4,80,97,000	68,02,000	23,74,23,000
	Contribution	...	64,000	14,19,000	...
	Expenditure	5,19,33,000	4,62,99,000	81,07,000	10,63,39,000
	Contribution	...	14,19,000	64,000	...
1901-1902	Receipts ...	18,65,00,000	4,93,23,000	69,07,000	24,27,30,000
	Contribution	...	2,45,000	12,21,000	...
	Expenditure	5,24,82,000	4,77,04,000	83,53,000	10,85,39,000
	Contribution	...	12,21,000	2,45,000	...
1902-1903 (Revised estimate).	Receipts ...	17,84,14,000	5,23,02,000	71,51,000	23,78,67,000
	Contribution	...	63,000	19,73,000	...
	Expenditure	5,33,89,000	4,96,55,000	81,18,000	11,11,62,000
	Contribution	...	19,73,000	63,000	...

157. It will be seen that the total receipts rose from Rs. 20,62,59,000 in 1898-99 to Rs. 24,27,30,000 in 1901-1902, and will have amounted to Rs. 23,78,67,000 in 1902-1903. The increase in 1902-1903, over the actuals of 1898-99, is Rs. 3,16,08,000 and this has been made up mostly by the following heads:—

	Total increase.	Increase in Provincial Section.	Increase in Local Section.
Land Revenue ...	5,52,000	2,82,000	...
Opium	1,33,44,000	...	...
Salt	12,27,000	...	...
Stamps	21,19,000	15,64,000	...
Excise	23,73,000	11,86,000	...
Provincial Rates ...	5,55,000	2,94,000	2,61,000
Customs	20,81,000	1,47,000	...
Assessed Taxes ...	8,09,000	4,04,000	...
Railways	73,84,000	...	...
Total ...	3,04,44,000	38,77,000	2,61,000

158. The total Provincial expenditure in the very first year under the new settlement rose to Rs. 4,96,56,000, while the receipts, after payment of the fixed contribution of Rs. 14,19,000, amounted to Rs. 4,66,24,000 only. The excess of expenditure over receipts thus amounted to Rs. 30,32,000, and reduced the balance at the credit of the Province from Rs. 39,54,000 at the beginning to Rs. 9,22,000 at the end of the year as stated above. Sir John Woodburn found the Province in these straitened circumstances, and it was inevitable that this should be the case after a period of severe famine, a great earthquake, and precautions against plague. It was incumbent on him in the very first year of his administration to cut down expenditure in all branches to the bare necessaries of administrative life, to make some provision for preventive measures against plague, and to apply the estimated surplus to the building up of the prescribed working balance as much as possible. The total expenditure in 1898-99 was Rs. 5,54,47,000, while the receipts, after payment of the fixed contribution and the surrender of $3\frac{3}{4}$ lakhs, but including the special grant of 17 lakhs made by the Government of India for the transfer of the administration of South Lushai Hills, aggregated Rs. 4,76,42,000. The expenditure

during the next three years amounted to Rs. 4,67,32,000 in 1899-1900, Rs 4,77,18,000 in 1900-1901, and Rs. 4,89,25,000 in 1901-1902, and was well within the receipts, which were Rs. 4,74,33,000, Rs. 4,81,61,000, and Rs. 4,95,68,000, respectively. In 1901-1902 an additional grant of five lakhs was made to the District Boards for the improvement of village and district communications and this was repeated in the succeeding year. For 1902-1903 the receipts, including the special grant of 18,00,000 from Imperial, were estimated to amount to Rs. 5,23,65,000. The total expenditure of the year, as anticipated in the revised estimate, was Rs. 5,16,28,000.

CUSTOMS.

159. During the four years 1898-99 to 1901-1902 there was a steady rise in the receipts under Customs. In 1898-99 the receipts, exclusive of salt duties paid at District Treasuries, were Rs. 3,93,02,658—an increase of nearly $3\frac{1}{2}$ per cent. over the figures of the preceding year. In 1899-1900 there was a further increase of 5 per cent., to Rs. 4,13,92,207. In 1900-1901 the rise only amounted to a half per cent., but in 1901-1902, with an increase of a little over $3\frac{1}{2}$ per cent., the figures rose to Rs. 4,25,81,071. As showing the extent to which the import and export trade of the province is centred in Calcutta, it is noteworthy that of the 426 lakhs collected in 1901-1902, nearly $404\frac{3}{4}$ lakhs were contributed by the Calcutta Custom House.

160. The most important change in the tariff effected during the period under review was that made by Act XIV of 1899, which was passed for the purpose of enabling countervailing import duties to be levied on bounty-fed articles, and which was, by the orders of the Government of India, made effective against all bounty-fed sugar. In 1899-1900 all machinery, irrespective of the use for which it was designed, was exempted from duty, but so many exceptions for specified industries had previously been made, that the change had little effect on revenue, though it put an end to much administrative inconvenience, and dissatisfaction on the part of the public.

In the same year on the recommendation of the Local Government, orders were issued by the Government of India, under section 19 of the Sea Customs Act, prohibiting the bringing, or taking by sea, into the territories administered by the Lieutenant-Governor of Bengal, of intoxicating drugs prepared from the hemp plant, except in the form of pharmaceutical preparations.

OPIUM.

161. Persistent ill-fortune has for some time attended the cultivation of opium both in the Bihar and Benares Agencies. Each year there promises to be a bumper crop, but blight, hail, or unseasonable rain appears and results in an outturn far below that originally estimated. This has been the experience of both agencies, though more especially of the Bihar Agency, during the period under review.

162. The following table shows for both agencies the net cultivation and the produce at 70° consistence during the years 1897-98—1900-1901:—

	Bihar.		Benares.	
	Net cultivation in bighas.	Produce at 70° consistence in maunds.	Net cultivation in bighas.	Produce at 70° consistence in maunds.
1897-98 ...	362,475	31,384	501,342	52,930
1898-99 ...	358,765	31,886	543,684	60,520
1899-1900 ...	347,948	28,210	632,969	73,027
1900-1901 ...	338,400	25,139	614,026	63,956

163. During the period much was done to facilitate irrigation by the construction of wells, and in 1900-1901 84 per cent. in Bihar and 96 per cent. in Benares of the area cultivated was irrigated.

164. During the year ending 30th September 1898 the prices obtained for provision opium ruled low, Bihar opium fetching only Rs. 993 per chest and

Benares opium Rs. 984. In 1898-1899 prices rose considerably in consequence of an increased demand for China and a partial failure of the opium crop in Malwa. Bihar opium averaged Rs. 1,139 per chest and Benares opium Rs. 1,128 per chest. In 1899-1900 and 1900-1901 there was a still further increase in the demand from China, and prices rose in the latter year to Rs. 1,371 per chest for Bihar opium and Rs. 1,372 per chest for Benares opium. From June 1901 however a steady decline set in, and up to the end of the period under review prices made little recovery. During 1899-1900 the Government of India passed orders directing the discontinuance of the purchase of Malwa opium. Accordingly the Government property in the charge of the Sub-Deputy Opium Agent in Malwa was sold, and the house occupied by him in Indore was given up. The experiment of packing opium of sufficiently high consistence in bags instead of jars was first tried in the Bihar Agency, and was subsequently extended to the Benares Agency. Where the consistence of the opium admits of their use, it has been found that the bags are more easily handled, packed, and stored than the earthen jars which were formerly universally employed.

165. In 1896 the Government of India ordered that the area of poppy cultivation in the two agencies should be fixed so as to produce 54,000 chests of provision opium for sale *plus* 7,000 to 8,000 maunds, at 90° consistence, of excise opium required annually for consumption in British India. On the basis of the average outturn per bigha cultivated during 1873-74 to 1894-95, it was estimated that an area of 924,318 bighas would be sufficient to produce the above quantity. It was subsequently found that in spite of an increase allowed in the total cultivation, the average yield per bigha was much less than that estimated in 1896, and that in consequence it was impossible to bring up amount available for sale in any year to the normal standard of 54,000 chests of provision opium. The whole question of outturn and cultivation therefore came under reconsideration, and in 1900 the Government of India decided that the area under poppy cultivation should, till further orders, be so regulated as to give an outturn of 48,000 chests of provision opium, to produce which it was estimated that an area of 1,022,000 bighas would be sufficient.

166. A very important change in the arrangements under which opium is cultivated in the Bihar Agency was effected by the tintroducion of what is called the 'intermediate' system. The old system of payment to the cultivators through the *khattadars* in the Bihar Agency was pronounced by the Opium Commission of 1883 and the Royal Opium Commission of 1895 to be open to objection; and the introduction of the *asamiwar* system of dealing direct with the poppy cultivators, which was in vogue in the Benares Agency, was advocated. The old system was unsatisfactory, inasmuch as good cultivators had to suffer for the laxity of the bad. Under the *khattadari* system a *khattadar* frequently inserted the names of fictitious raiyats in the list of those who engaged to grow opium, drew advances for them, and used the sum as a loan without interest until he had to repay it at weighment time. When this time arrived each raiyat's opium was separately weighed and recorded, but nevertheless payment was made to the *khattadar* in a lump-sum. If there were fictitious raiyats on the list, or men who cultivated badly or whose cultivation was only nominal or a colourable pretext for obtaining an advance, the deficit on the advances made to them was deducted from the surplus earned by good raiyats whose outturn exceeded their advances. This practice was represented to be one of the causes for the decrease in the area under opium and in the outturn obtained, the best cultivators being discouraged and disgusted. Accordingly Mr. A. G. Tytler, C.I.E., late Sub-Deputy Opium Agent, devised the "intermediate system," which was in effect a compromise between the Bihar and Benares system. It provided for the separate adjustment of each raiyat's accounts at the time of weighments, but payments were to be made as before through the *khattadars*. The system was experimentally introduced in the Siwan, Bettiah, and Tirhut sub-agencies; it was worked for four seasons in the first and for two seasons in each of the other two sub-agencies, and was reported to the Government of India in December 1900 to have been worked with success. On the recommendation of the Board of Revenue and of this Government, the Government of India sanctioned the introduction of the system, with effect from the 1st September 1901, in the remaining Sub-agencies of the Bihar Agency, with the exception of the

Hazaribagh Sub-agency, where the *asamiwar* system, as worked in the Benares Agency, had already been definitely introduced.

167. Another important change effected with the same object as well as with that of improving the pay and status of the mufassal *amla* was the re-organisation of the *kothi* and office establishments in both agencies. The question of the necessity for this change had been raised and discussed by the Opium Commission of 1883, but as its cost was then estimated at over Rs. 3½ lakhs the matter was allowed to drop on financial grounds. It was however revived by the Royal Commission on Opium of 1895, who strongly advised the introduction of the reforms, on the ground that the inadequacy of the pay of the establishments in question was a grievance of long standing, and that the better payment of the inferior native officials would in the long run benefit the cultivators. Proposals were accordingly submitted to the Government of India, and eventually the revision of the establishments at a net additional cost per annum of Rs. 96,177 was sanctioned by the Secretary of State, with effect from the 1st September 1901. The increased cost was mainly the result of enhanced rates of pay, a comparatively small amount being due to the creation of additional appointments rendered necessary by the extension of the intermediate system in Bihar referred to above. With the revision all commission was discontinued, except that allowed to zilladars for special reasons in respect of excess cultivation over a given standard.

168. Other minor changes affecting the establishment were the revision in March 1899 of the factory establishment of the Bihar Agency at an additional yearly cost of Rs. 2,117, and the re-organisation of the guard establishment at the Benares Factory at an increased cost per annum of Rs. 3,296.

169. In October 1898 the orders of the Government of India were received on the subject of the method of recruitment of Europeans and Eurasians for the Opium Department, which had been under discussion for some time. It was decided that the Lieutenant-Governors of Bengal and of the United Provinces alone should nominate in future, that there should be no maximum limit to the number of candidates nominated, and that selection among the latter should follow the results of a competitive examination to be held under the orders of this Government, which is responsible for the successful working of the Opium Department. These orders made no change in the systems of appointment of native officers, who are appointed to every fourth vacancy in the Department on the nomination, alternatively, of the Lieutenant-Governor of these and of the United Provinces.

170. In 1900 rules were framed, and approved by the Government of India, for regulating the pay and position of officers of the Department under the scheme of re-organisation sanctioned by the Secretary of State. The Department now consists of a cadre of 69 sanctioned appointments, and may from time to time also include a varying number of junior officers recruited up to a limit of 2·6 per cent. per annum of the cadre under the scheme for uniform recruitment in temporary excess of the sanctioned scale. A probationer receives upon appointment Rs. 140 a month; after passing the Departmental Examinations, and if well reported on, he is allowed to draw a personal pay of Rs. 170 a month till the occurrence of a vacancy in the sanctioned cadre. Probationers who do not pass the Departmental Examinations within two years from the date of their appointment are liable to have their names removed from the list or to be superseded.

171. During 1900-1901 the Secretary of State's sanction was conveyed by the Government of India to the institution of a provident fund for gazetted officers of the Opium Department.

European and Eurasian officers other than those required to subscribe, and Native officers have the option of subscribing to the fund.

SALT.

172. Several changes occurred during the period under review in the administration of the Salt Department and in the scope of its operations. In September 1898, orders were issued under section 6 of the Indian Salt Act, XII of 1882, absolutely prohibiting the manufacture of salt in the districts of the

24-Parganas (except Calcutta), Midnapore, Khulna, Backergunge and Chittagong, so as to enable the salt officers employed in those tracts to send up cases of illicit dealings in salt. In 1899-1900 the sanction of the Secretary of State was obtained to the scheme, as finally revised, for the better administration of the Salt Department and the formation of an administrative and preventive staff for the suppression of the illicit manufacture of salt in the maritime districts. During 1900-1901 the provisions of the Indian Salt Act, XII of 1882, were, with the approval of the Government of India, extended to the districts of Howrah and Noakhali, and with this extension the entire sea-board of Bengal became subject to the Act. During the same year orders were issued by the Government of India for the transfer of the supervision of the saltpetre refineries in Calcutta and its suburbs from the Northern India Salt Revenue Department to the Salt Department in Bengal. The transfer was carried out in the following year with effect from the 1st July. In 1901-1902 a suggestion that the manufacture of salt in Orissa under the excise or licensed system might be revived was considered by Government and finally held to be impracticable.

173. The net revenue from salt was, in 1898-99, Rs. 2,47,13,018; this figure was higher than that recorded in any of the preceding ten years, except 1896-97, but it was surpassed in the following year, when the net revenue rose by 2·8 per cent. In 1900-1901, imports fell off considerably chiefly in consequence of high freights and the efforts of the Salt Union to raise the price of salt at Liverpool: with the resultant decrease in import duties the net revenue fell by 1·6 per cent. This decrease was, however, more than balanced by a rise of 2·2 per cent. in 1901-1902 when the net revenue amounted to Rs. 2,55,21,299. The total consumption of salt in the Province rose steadily from 9,833,328 maunds in 1898-99, to 10,431,438 maunds in 1901-02. In the latter year, as roughly estimated, the consumption per head in the saliferous tracts was a little over 6 seers, and in the rest of the province 5 seers 3 chittaks. The average wholesale price of salt per maund in the Province was, in 1898-99, Rs. 3-10-9; in 1899-1900, Rs. 3-9-4; in 1900-1901, Rs. 3-11-7, and in 1901-1902, Rs. 3-12-9. The prosecutions instituted under the Salt Acts in the four years, 1898-99—1901-1902, were 966, 851, 898, and 1,238, respectively. The import figures for 1901-1902 show that the larger portion of the salt imported into Bengal comes from the United Kingdom, though its former more extensive monopoly is being encroached upon by other competitors. The imports from Aden and the Red Sea are increasing rapidly, and as these salts do not have to pay the dues of the Suez Canal they compete on favourable terms with salts imported from Europe. A feature of the period has been the growing popularity in Orissa of Madras salt. In the two years, 1899-1900 and 1900-1901, the imports of Madras salt into Orissa rose by over 32 per cent., while the imports of Liverpool salt fell off by 26 per cent. In 1901-1902 there was a small decrease in the imports of the Madras article, but it is possible that this slight check is only of a temporary nature.

EXCISE.

174. Excise administration received a good deal of attention during Sir John Woodburn's tenure of office. In March 1898 the Government of India suggested the adoption of the following measures with the object of safeguarding the revenue from country spirit, which contributes nearly one-half of the excise receipts of the province:—

(1) Improvement of the distilleries and of the class of officers in charge of them.
(2) Issue of distillery liquor at strengths adapted more carefully to the taste of the consuming population in the various districts.
(3) A possible reduction of the still-head duty in places where the existing rate was likely to stimulate illicit practices.
(4) Improvement and strengthening of the excise preventive establishment.

175. With regard to the first measure, it was decided that as no cases of illicit issue of liquor from distilleries had been brought to light within recent

years, no change in the officers in charge of them was called for. The question of the improvement of the distilleries themselves was referred to the Excise Commissioner, and he was asked to consider the feasibility of enlisting the aid of capitalists in the distillation of liquor in the larger distilleries by improved methods. The Excise Commissioner reported strongly against the introduction of the proposed measure, and urged that it would lead to the establishment of a monopoly in manufacture, vested in a small number of capitalists, which might be dangerous to the revenue as well as mischievous in encouraging a taste for stronger liquor than that at present consumed. A further argument brought forward was that, under existing conditions, the process of manufacture at the principal distilleries had already attained a high standard of efficiency, capable of little further improvement. For these reasons it was decided that no change in the existing system was necessary or desirable. As regards the second measure proposed, enquiries showed that strong liquor was issued, to suit the taste or pocket of townsfolk or for convenience and with a view to cheapness of transport, where the areas served were at a distance from the distilleries, and that in the latter case the vendors diluted the liquor to meet the local taste. It was therefore decided that no further action on the lines indicated by the Government of India was required. In accordance with the third suggestion, the rate of still-head duty was modified in five districts, and as regards the fourth, proposals for strengthening and improving the preventive establishment at an additional cost of roughly Rs. 65,000 were formulated and submitted for the approval of the Government of India and the Secretary of State. Sanction was received to the scheme in February 1902, and effect given to it in the following financial year.

176. Previous to 1898-1899 payment of duty was made in Bengal on all ganja exported to the United Provinces, and the exporters took the drug from Naogaon, the centre of the ganja tract in the district of Rajshahi, or from the golas in the districts of the Patna and Bhagalpur Divisions. The Government of India having decided in April 1896 that ganja should in future be exported to the United Provinces in bond, rules were framed, in consultation with the Government of those provinces, regulating the export of the drug from Naogaon and Patna.

177. In May 1898 the Government of India decided to confine the import of Rosa rum and similar spirits into Bengal from the United Provinces to bonded spirit only. Before effect was given to this decision the proprietors of the Rosa distillery represented that the system would put an end to the firm's direct trade with their customers in Bengal outside the Calcutta Circle. Eventually it was thought that the compulsory bonding order imposed a restriction on the trade of the distillery, which, while not at present affecting it to any very great extent, might tend to check its legitimate expansion in the future, and the firm was allowed the option of sending their Bengal consignments of rum and other spirits, either in bond for payment of the full duty of Rs. 6 per gallon (London-proof) leviable thereon in the province of destination, or after pre-payment of the same rate of duty in the United Provinces.

178. The question of raising the duty on *bhang* came under consideration in 1899-1900, it having been shown that the incidence of taxation derived from license fees on the sale of the drug largely exceeded the direct taxation. It was decided that while a general enhancement of the rate of duty was not desirable, it might be useful to introduce varying rates of duty in different districts according to the circumstances of each. With this object therefore the rate of duty on the drug was raised from eight to twelve annas per seer in the districts of Midnapore, Hooghly, Howrah, Calcutta, and the 24-Pargannas and in the Raniganj and Sadar Sub-divisions of the district of Burdwan. The enhancement of the rates is reported not to have affected consumption in these localities.

179. As the use of cocaine as an intoxicant had become common in Calcutta, and as the habit had spread to some mofussal districts, it was found necessary in 1900-1901 to include the drug in the definition of "Intoxicating drugs" in section 4 of the Excise Act, VII B.C. of 1878, and to prohibit its sale except under license and for *bonâ-fide* medicinal purposes.

180. At the beginning of the period under review the Madras *tari* tree-tax system, under which every tree yielding *tari* pays a tax according to a fixed rate,

was given a trial, so far as this was possible without amendment of the law, in selected areas in the Province ; in June 1900, it was however decided to abandon the idea of introducing the system generally in Bengal, it being considered that no advantages were likely to follow from the exercise of a stricter control over the sale of *tari* which would be commensurate with the evils inseparable from such a measure.

181. In 1901-1902 the trade in German white spirit was the subject of correspondence between Government and the Board of Revenue. The conclusion arrived at by the Board was that the spirit was less noxious than was popularly supposed, and that the main remedy required was some control over the operation of bottling it in this country, not with the object of checking the sale of the liquor, but in order to prevent customers being deceived. This control will be given by the provisions which with the consent of the Government of India have been inserted in the proposed Excise Bill.

182. The amendment of the Excise Act, VII B.C. of 1898 had been under consideration for some time, and in July 1902, a revised Bill to amend and consolidate the Act was submitted to the Government of India. In respect of its general form and arrangement, the new Bill follows to a great extent the model of Act XII of 1896, though it borrows a number of provisions from the excise law of Bombay and Madras. It is mainly a consolidating measure and accordingly re-enacts large portions of Bengal Act, VII of 1878.

183. In 1898-99 the net revenue from excise amounted to Rs. 1,27,52,725 as against Rs. 1,20,70,856, in the previous year, showing an increase under all heads except under rum. In the following year there was a further rise to Rs. 1,32,80,000; an increase of Rs. 4,15,938 in the receipts from "country liquor" was chiefly responsible for this, but all heads except beer, *bhang* and *ganja* contributed to the rise. In 1900-1901 the net revenue advanced to Rs. 1,39,75,051, all heads except beer, *tari*, methylated spirit and miscellaneous sharing in the increase. A considerable decrease under methylated spirit was the result of very necessary restrictions imposed upon dealers and importers with a view to preventing this spirit from being drunk. It has now to be denaturalised by caoutchoucine so as to be rendered impotable. In 1901-1902 the figure reached (Rs. 1,43,49,491) was the highest on record: as usual the largest increase occurred under country liquor, but receipts under *ganja* advanced by Rs. 1,71,536. Only rum and beer showed a decrease. During the period the average incidence of excise revenue per head of population steadily rose from 2 annas 10 pies in 1898-99 to 3 annas 2 pies in 1901-1902. Illicit distillation continued in the Burdwan Division and in the district of the Sonthal Parganas, and there was considerable importation of cheap liquor into Jalpaiguri from Bhootan and Cooch Behar. Smuggling of opium into Burma as in previous years gave much trouble.

STAMPS.

184. DURING the period important changes were made in the laws under which the administration of the Stamp Department is conducted. The Indian Stamp Act, II of 1899, which revised and consolidated the Act of 1879, received the assent of the Governor-General in Council in January 1899, and came into force on the 1st July of the same year. The Court Fees Act of 1870 was also further amended by Act XI of 1899 with the object, first, of providing a check on the undervaluation of estates by persons applying for probate of a will or for letters of administration, and, secondly, of giving the revenue authorities greater facilities for the realisation of the full amount of duty payable on such instruments. In December 1899 rules were prescribed, with the sanction of the Government of India, under section 74 of the Stamp Act, regulating the sale and supply of stamps and stamped paper, the persons by whom alone such sales should be conducted, and the duties and remuneration of such vendors. New rates of discount were allowed by the Government of India on the sale of judicial and non-judicial stamps in all provinces, with effect from the 1st April 1900. In 1901-1902 the rates of discount allowed on certain non-judicial stamps were reduced in Calcutta, and Local Governments were authorized at their discretion to make the same reduction in the case of any town with a population of

50,000 inhabitants and over. Accordingly the reduced rates were extended to the towns of Patna, Gaya, Chapra, Darbhanga, Dacca, Bhagalpur, Monghyr and Cuttack, and to the sadar stations of Howrah and the 24-Parganas. The new rates were also, under special orders of the Government of India, made applicable to portions of the suburbs of Calcutta and to the sadar station of Hooghly.

185. The net revenue from stamps, which in 1898-99 was only Rs. 1,68,96,410 as compared with Rs. 1,72,54,671 in the previous year steadily increased in the three following years, and in 1901-1902 amounted to Rs. 1,85,23,920. In 1899-1900 the increase in receipts occurred in both judicial and non-judicial stamps, in 1900-1901 only in non-judicial, and in 1901-1902 in both kinds of stamps. In 1898-99 there were 1,274 prosecutions under the Stamp Acts; but in the three following years prosecutions only averaged 580. Of the total stamp revenue collected in 1901-1902, Calcutta contributed roughly one-seventh.

INCOME TAX.

186. The net revenue from income tax in 1898-99 was Rs. 48,94,432. In the following year there was a further rise of nearly 3 per cent. In 1900-1901 there was a large decrease under "Profits of companies," the result of slackness in the jute and cotton trades and of a bad season in Darjeeling, and the increase in the net revenue was only ·9 per cent. In 1901-1902 the net revenue rose by 7½ per cent., and amounted to Rs. 54,43,337. The year was in Calcutta a prosperous one, especially for the jute and coal industries, and an increase of over 2½ lakhs in the realisations there was mainly responsible for the rise in the net revenue of the Province.

Of the total amount realised in 1901-1902, Rs. 24,94,945 were collected in Calcutta and Rs. 23,50,538 in the rest of the Province. The number of persons in proportion to each rupee of tax assessed throughout Bengal was in the same year 14·5.

ROAD AND PUBLIC WORKS CESSES.

187. In 1899-1900 it was decided to introduce gradually the provisions of the Bengal Cess Act, IX (B.C.) of 1880, into the Sonthal Parganas (excluding the Damin-i-koh), as portions of the district came under re-settlement. Accordingly in 1900-1901 orders were issued extending the Act to certain tracts in the district with effect from the 1st September 1901. Including the Sonthal Parganas there were, at the end of 1901-1902, 44 districts under the operation of the Act, and in 33 of these valuations or re-valuations, partial or complete, were in progress during the year. As a result of these operations the gross rental on which cesses are levied has steadily risen from Rs. 13,11,68,432, the amount when the road cess was first introduced, to Rs. 17,03,53,369, the basis of assessment in 1901-1902. During the four years the cesses were levied at the maximum rate of one anna in the rupee.

Collections in most of the districts were excellent. In 1901-1902 out of a total demand of Rs. 1,10,02,066, Rs. 93,13,325 were collected, the percentage of total realisations on current demand being 99·8.

VITAL STATISTICS.

188. In 1899, in order to secure the proper registration of vital statistics within railway limits, and the regular reporting of such statistics to the local civil authorities, the several railway authorities in the Province were asked to issue notices to all their employés, and to all people living within railway limits on railway lines and on all railway lands (whether within or without the jurisdiction of the railway police) requiring them to report regularly and promptly all births and deaths to the station-masters in whose jurisdiction they reside. The station-masters were directed to record the information so received in forms prescribed for the purpose, and to send the latter on the first day of the month to the Civil Surgeon of the district in which the area was situated. Deaths occurring in

trains were also to be similarly dealt with. No other change was made in the arrangements for collecting and recording the vital statistics of the Province.

189. The number of births and deaths recorded during the four years were—

	Births.	Rate per mille.	Deaths.	Rate per mille.
1898	2,543,701	35·79	1,888,468	26·57
1899	3,053,178	42·96	2,128,243	31·21
1900	2,749,582	36·95	2,603,736	34·99
1901	2,870,806	38·57	2,310,424	31·04

189. The two most prominent features of the period were the high birth-rate in 1899, and the high death-rate in 1900. The former was ascribed to the general healthiness of the year 1898, and the recovery of the people from the famine of 1897. The latter was undoubtedly the result of severe epidemics of plague and cholera, the number of deaths from the latter disease (345,878) being the highest on record: other bowel complaints were extremely common and small-pox prevailed in Orissa.

PLAGUE.

190. THE commencement of the administration of Sir John Woodburn was almost co-incident with the advent of plague in Bengal. The first outbreak in this Province occurred in Calcutta, and was heralded in the middle of April 1898 by the discovery of an abnormal number of dead rats in the town, which bacteriological examination showed to be infected with plague. Almost simultaneously a case of plague, which ended fatally, was discovered on the 16th April 1898. From this date to the 29th April there were 30 seizures and 24 deaths, and on the 30th April the Lieutenant-Governor, at a meeting of the Legislative Council, publicly declared its existence, and propounded the policy to be adopted in dealing with it. The main items were segregation, disinfection, and voluntary inoculation. House-to-house visitation was carried on by Vigilance Committees, in conjunction with the medical authorities, for the purpose of reporting plague cases, but their efforts achieved but little success. On the appearance of plague in Calcutta a panic set in causing an extensive exodus from the city. The fear of inoculation was partly the cause of, and partly the excuse for, some serious disturbances. The feeling against it was, however, to some extent allayed by the precepts and laudable example of some of the leading citizens; and steady progress was subsequently made, some 2,500 persons having been inoculated up to 23rd July 1898. The disease reached its highest point in June: it then declined, and from the 18th September to 10th October 1898 no attack or death was reported. Calcutta was accordingly declared free from plague in the latter month. During this first outbreak there were 227 attacks and 189 deaths.

191. Plague reappeared in Calcutta in February 1899, necessitating the reimposition of the restrictions withdrawn in October. The experience gained during the previous year had shown, however, that the orders for the compulsory removal of plague patients to public or private hospitals had led to an extensive and dangerous concealment of cases. Instructions were therefore issued in February 1899 directing that no person should be removed to a hospital against his will, and that when a patient objected to go to a hospital, he should be treated in his own house, the premises being thoroughly disinfected after the termination of the case. The work of disinfection was extended both in scope and efficacy. Inoculation was but little practised during this second outbreak, not because of any active opposition, but because the fear of plague was no longer strong enough to induce a resort to it. From January to March 1899 there were 893 attacks and 818 deaths.

Outside Calcutta there was a small but virulent outbreak in the district of Backergunge in September 1898, resulting in 11 fatal cases. There were also isolated outbreaks in ten districts between January and March 1899.

192. To guard against the diffusion of plague from Calcutta into the towns and villages of the interior as well as to other Provinces, passengers by rail from Calcutta were subjected to inspection at frontier observation camps at Chausa, Mairwa, Chakradharpur, and Khurda Road, as well as at Howrah

and Sealdah stations. Places of inspection were also established on the lines of rail and steamer routes around Calcutta, at the nearest points practicable, without affecting the suburban traffic. It was not, however, thought possible to control the movements of travellers by road or country boats. Orders were also issued that the passengers leaving Calcutta by sea should be subjected to medical examination strictly in accordance with the provisions of the Venice Convention.

193. The principal measures taken in the interior were the evacuation of the infected houses and of those sections of the villages in which plague cases had occurred, and the segregation of the sick and their attendants. In March 1899 orders were issued confining the operation of these measures to purely rural areas, where the means of segregation were easy and simple. For certain large towns, including Howrah, Patna, Dacca, and Gaya, it was directed that the revised rules regarding segregation issued for Calcutta should be applied, while for smaller towns of a really urban character it was left to the discretion of the local officers to decide whether the Calcutta rules or the village rules should be applied, or some modification of the two.

194. During 1899-1900 plague both extended and tightened its grip on the Province. The total recorded mortality from the disease was 23,551, and was distributed between Calcutta (6,249), Patna (15,014), Saran (1,121), Monghyr (706), and twenty other districts. Calcutta remained infected throughout the year, but the disease began to decline after the first week of April 1899, reached its lowest point in July, rose again in January 1900, and reached its climax in March 1900, in which month 3,332 deaths from the disease were recorded. Government policy remained unchanged. The house or room occupied by a plague patient was disinfected, and the occupants of the neighbouring houses were persuaded to have their premises also disinfected. The measures adopted in Calcutta met with no opposition from the people and caused no panic. In the case of the majority of mufassal districts also no serious difficulty was experienced. The only districts in which resistance was offered to the enforcement of all precautionary measures of whatever description were Patna, Saran, and Monghyr, and in these the resistance culminated in acts of open violence. These breaches of the peace led Sir John Woodburn to consider to what extent it was expedient to employ force for the purpose of carrying out the evacuation and disinfection of infected houses and villages. After discussing the point with certain selected officers, the Lieutenant-Governor directed that local officers should abstain from employing force, and that they should persevere, with all the patience, tact and kindliness they could command, in impressing on the people the importance of resorting to these measures. If any person or class of persons nevertheless finally refused to comply, force should not be used to coerce them, but they should be left to take such steps as they might be willing to adopt. These views were subsequently reaffirmed by the Indian Plague Commission, whose report was published in the following year, and by the Government of India in their Resolution reviewing the report.

195. The decline of plague in Calcutta during the hot weather of 1899 rendered it possible to close some of the smaller plague camps, and to empower local officers to discontinue the system of recording at railway stations, by Police agency, the names and addresses of passengers from Calcutta.

196. The year 1900-1901 was marked by a serious increase of plague throughout the Province, the number of reported deaths rising from 23,551 in 1899-1900 to 72,341. The increase was greatest in the districts of Patna, Saran, and Gaya. In Calcutta, where also an increase occurred, the course of the epidemic resembled that of the previous two years, and as in those years, there was a rapid fall after the beginning of April. The measures adopted remained unchanged, and disinfection, which was carried out on an extensive scale, was the main instrument employed.

197. During the year in question the plague regulations of Bengal were revised in the light of the report of the Indian Plague Commission. The practice prescribed by the revised rules did not differ, however, in any material respect from that already laid down by Sir John Woodburn. The discretion which by executive orders had been left to District Officers in the administration of the rules previously issued was now conferred on them by the rules themselves. For instance, the principal features of the revised regulations are the exclusion from

the rules for Calcutta and other large municipal towns and cantonments of all provisions for the compulsory removal of patients to hospital, and the segregation of contracts, and the strict limitation of the use of such measures in the interior to rare and specified cases. The power to employ cordons, which had been resorted to in some cases to compel people to evacuate infected houses, was now entirely withdrawn. In accordance with the policy declared by the Government of India, 11 places of inspection out of 16 were abolished in November 1900.

198. During 1901-1902 the outbreak was far less severe than in the previous year, and the number of reported deaths fell to 38,287 from 72,341 in 1900-1901. The districts that suffered most were Patna, Gaya, Saran, Shahabad and Darbhanga, and to a lesser degree those of Muzaffarpur, Monghyr and Hazaribagh.

In Calcutta the total number of deaths from plague was 6,092 against 8,837 in the preceding year. The course of the epidemic closely resembled that of the preceding years. Disinfection was, as usual, the sheet anchor in the operations of the Plague Department. Huts which were known to be plague centres were also demolished, compensation being paid to the owners.

In the mufassal, disinfection was still regarded with suspicion, and evacuation was the one preventive measure generally accepted by the people. In Gaya inoculation was received with far more willingness than elsewhere, and a large number of the inhabitants resorted to it.

199. Inspection of passengers having been introduced at Fatehpur and Bhatni stations in the United Provinces of Agra and Oudh, the retention of the Inspection Camps at Chausa and Mairwa was considered unnecessary, and they were therefore closed in March 1902. Inspection at Jhobra ferry in the district of Cuttack and at the Cuttack railway station was discontinued in October 1901 and October 1902 respectively. The only place of inspection now left in Bengal is Siliguri on the Northern-Bengal Railway.

200. From April to October 1902 there was a steady decline of plague in Calcutta, though not at the rapid rate maintained in 1900 and 1901. From November, however, the disease began to rise again. In the mufassal also the decline continued till September 1902. In October there was a general recrudescence in the Patna Division, and in November the epidemic continued to increase.

201. The experience of these few years has shown a distinct periodicity in the progress of the disease which is as clearly marked in the Province at large as in Calcutta. Omitting the figures for 1898 it appears that the highest mortality has been reached during the first week of April in 1900 and 1902, during the second week of April in 1899 and during the last week of March in 1901. Taking the Province as a whole and including Calcutta, the mortality was highest in 1900 and 1901 in the last week of March, in 1899 in the third week of March and in 1902 in the first week of April.

EMIGRATION AND IMMIGRATION.

202. The State-recognised emigration from the Lower Provinces of Bengal falls under two categories—Inland and Colonial, each of which is regulated by a separate law. By Inland emigration is meant emigration to the labour districts of Assam, where there is a demand for coolies in connection with the tea industry. By Colonial emigration is meant emigration beyond the sea to British or to foreign Colonies. The great recruiting ground in the Lower Provinces of Bengal for emigrants to Assam is Chota Nagpur and the Sonthal Parganas, and these tracts contributed, roughly, 93 per cent. of the emigrants in 1901.

203. The greater number of the emigrants despatched from Calcutta to the Colonies are recruited in the United Provinces of Agra and Oudh, but the proportion borne by these to the total number sent off has steadily fallen during the four years, 1898—1901, from 87 to 63 per cent.

204. Emigration from Bihar to certain waste-land estates in Burma, though not under State regulation, is subsidised by Government. The number of such emigrants was in 1898-1899, 253; in 1899-1900, 570; in 1900-1901, 843, and in

1901-1902, 1,549. In 1901-1902, in extension of former arrangements and in view of the increasing number of emigrants to Burma, an arrangement was made with the British India Steam Navigation Company, with the consent of the Government of Burma, under which the Company undertook to convey for five years, from Calcutta to Rangoon, as deck passengers, at Rs. 7-8 each, or Rs. 2-8 per head below the ordinary charge, 1,500 emigrants during 1901-1902, and 2,000 during each of the succeeding four years, provided that not less than two-thirds of such emigrants are despatched during the months of January to July in each year. This Government and the Government of Burma have undertaken to pay to the Company, in equal shares, one-third of each reduced fare, or Rs. 2-8 for each emigrant so despatched.

205. In addition to the emigration described above, there is annually a large migration of labourers from the United Provinces and Bihar to parts of the Burdwan and Rajshahi Divisions, and to all the districts of the Dacca Division. These are not permanent settlers, but seek labour where wages are good. Similarly work in the tea gardens and roads in the district of Jalpaiguri attracts coolies from Chota Nagpur and Bihar in increasing numbers. Uriyas go to Calcutta and other places near in search of work, returning home at the harvest season. Lastly, the wages offered in mills in Calcutta and at places within the districts of the 24-Parganas, Howrah, Hooghly, Burdwan, and Dacca, coupled with the provision of better accommodation, and the fact that the labourer's wife and children can obtain employment as well as himself, operate as a strong incentive to the people of the United Provinces and Bihar to emigrate to these places.

206. The law regulating Colonial emigration (Act XXI of 1883) was, during the period under review, amended by Act X of 1902 in order to regulate the engagement of natives of India as artizans, or for exhibitions, entertainments, or service in places of public resort or domestic service abroad, save as provided in sub-section (2) of section 107. The alterations made in the terms of engagement of intending emigrants were comparatively unimportant. The number of emigrants steadily increased during the four years 1898—1901 from 6,223 in 1899 to 11,951 in 1901. In each of the four years Demerara took considerably the largest number, and for the three years ending 1901 emigrants to that island averaged nearly 4,400. Of the other colonies, Trinidad and Fiji were the most popular. The figures given as to the average savings of the emigrants to the various colonies are for obvious reasons not very reliable, but it is noteworthy that the Indians in Natal, numbering roughly 66,000, remitted to India by money-order during 1901 nearly 12½ lakhs of rupees. The popularity of the several colonies is perhaps better gauged by the number of re-emigrants to each, and by this standard Demerara comes easily first in 1901, for of the total number who re-emigrated during that year over 71 per cent. went to that island, Natal coming next with 16 per cent.

207. Far reaching changes were made in the conditions regulating inland emigration by the introduction of Act VI of 1901, which received the assent of the Governor-General in Council and came into force on the 9th March 1901, repealing Act I of 1882 and Act I (B.C.) of 1889. The changes made were the direct result of the recommendations made by the Labour Enquiry Commission of 1895, and their leading object was to check the abuses which had sprung up in connection with the system of so-called free, but really assisted, emigration carried on by unlicensed professional recruiters, chiefly in the most backward parts of the Central Provinces and Bengal. In order to secure this object, power is given to Local Governments to prohibit, with the sanction of the Governor-General in Council, all persons from recruiting, engaging, inducing, or assisting any native of India or any specified class of natives of India to emigrate from the whole or any specified part of a province to any labour district or any specified portion of a labour district either absolutely or otherwise than in accordance with the provisions of the Act. Provision is also made in the Act for the introduction of a system of *bonâ fide* assisted emigration by duly-authorised garden sardars by permitting Local Governments, with the sanction of the Governor-General in Council, to allow such garden sardars to recruit labourers in the areas which have been previously closed against free recruitment by unlicensed recruiters and to take them to the gardens of their employers without having them registered or put on contract.

208. Finally, the provisions of the Emigrants' Health Act, I (B.C.) of 1889, have been incorporated into the new Act, so that the health, supervision, and control of assisted as well as of contract labourers have been provided for.

209. The appointment of a Travelling Superintendent of Emigration in the recruiting districts was strongly recommended by the Labour Enqury Commission with a view to prevent abuses and to enforce due observance of the Emigration law. In accordance with this recommendation, after the passing of the new Act, a Travelling Superintendent of Emigration for Bengal and the Central Provinces, with his head-quarters at Purulia, was appointed with the sanction of the Government of India. In addition to this officer, five Superintendents were appointed with jurisdiction, respectively, over the following districts : (1) Ranchi and Palamau, (2) Singhbhum and Manbhum, (3) Hazaribagh, (4) the Sonthal Parganas, and (5) the remaining districts of Bengal.

210. Soon after the publication of Act VI of 1901, a revised set of rules was framed, embodying those previously issued under Act I of 1882 and Act I (B.C.) of 1889 with such modifications and improvements as were necessary to bring them into conformity with the provision and spirit of the new Act. The more important of the changes made in the rules relate to the licensing of persons to be local agents and selecting agents, the registration of intending emigrants in the district of recruitment and the regulation of assisted emigration carried on under the provisions of Chapter V of the Act. Provision has also been made for the regulation of emigrant traffic from Madras, Orissa, and Midnapore by prescribing the routes by which emigrants from these places shall be conveyed to the labour districts. A new feature of the amended rules is the provision made therein for the repatriation under proper escort of all emigrants whose labour contracts are determined while *en route* to the labour districts, as well as those who are released from their contract in the labour districts.

211. One of the most important measures taken by Government with the view of dealing with the abuses of professional unlicensed recruiting and of facilitating recruitment by garden-sardars under the special provisions of section 90 of the Act was to prohibit by notification, with effect from the 15th July 1901, the recruitment of natives of India, except by contractors under Chapter III and by certificated garden-sardars under Chapter IV, from any of the districts of the Chota Nagpur division and the Sonthal Parganas district for the purpose of inducing or assisting them to emigrate to the labour districts of Assam. At the same time Government declared that on and with effect from the same date, specially employed garden-sardars, not being garden-sardars holding certificates under Chapter IV of the Act, may engage persons on behalf of their employers in the Sonthal Parganas and in the districts of Hazaribagh and Manbhum, and assist them to emigrate to the labour districts of Cachar and Sylhet, subject to the provisions contained in clauses (*a*) to (*i*) of section 90 of the Act.

212. In 1898 altogether 48,429 emigrants were despatched to the labour districts of Assam, the number being considerably below the average of the preceding five years (excluding the famine year of 1897) which was roughly 60,000. In 1899 there was a still further fall in the numbers to 33,693, but in 1900 bad harvests in the recruiting districts brought up the numbers to 65,190 or nearly double what it had been in the previous year. In 1901 the figures fell just as abruptly to 30,777. This diminution is to a great measure to be explained by more prosperous conditions in Chota Nagpur, but was also ascribed by the Commissioner to the circulation locally of wild stories exaggerating the responsibilities incurred by garden sardars under the new Act. There is a further, and to the planter a more serious, reason. Coal mines in Bengal have increased rapidly of late, both in number and size, and the mine owner is now a formidable competitor with the tea-planter in the districts of labour supply. He gives higher wages, and the mines have at least the attraction of being nearer the districts of recruital. The effect of the prohibition of recruiting otherwise than under Chapters III and IV of the new Act in the districts of the Chota Nagpur Division, the Sonthal Parganas, and in the Central Provinces is shown in the figures for 1901. Of the total number of emigrants despatched to Assam in that year, only 34 per. cent as against 40 per cent. in the preceding year were free emigrants.

MEDICAL SERVICE.

213. An important and desirable change was made in 1899-1900 in medical administration by the transfer of the control of Medical Education from the Director of Public Instruction to the Inspector-General of Civil Hospitals. In 1900-1901, on the recommendation of the Central Indigenous Drugs Committee, the Government of India directed that the Provincial Committees, as at first constituted, should be abolished, and that one or more physicians in important towns, who were likely to give special attention to the investigations prescribed, should be entrusted with the further pursuit of the enquiries. In Bengal the work was accordingly given to certain medical officers at the Presidency and to the Civil Surgeon of each district.

214. In 1901, a much needed improvement in the pay and prospects of Civil Hospital Assistants was sanctioned by the Government of India. The chief features of the scheme were the redistribution of the grades and pay of the service, including the formation of a senior grade on Rs. 70 per mensem, and the reduction of the period of service in each grade from 7 to 5 years.

215. The number of patients attending the Calcutta Medical Institutions during the four years 1898—1901 are shown below:—

	Outdoor.	Indoor.
1898	187,518	23,732
1899	219,302	24,146
1900	251,822	28,372
1901	253,615	25,989

The total income and expenditure of the various medical institutions rose from Rs. 10,20,486 and Rs. 9,92,192, respectively, in 1898 to Rs. 10,29,406 and Rs. 9,95,468 in 1901. In addition to the construction of the Presidency General Hospital, much was done to add to and improve the accommodation provided by the several medical institutions, especially at the Campbell and Medical College Hospitals. A new leper asylum at Gobra was opened in May 1901: under section 3 of Act III of 1898 it has been declared an asylum for the purposes of the Act, and a set of rules has been framed and a Committee appointed for its management. At the Presidency General Hospital a much needed reform was effected in 1898 by the appointment of a whole-time Superintendent who is debarred from private practice, and by the thorough revision of the establishment.

The attention of Government having been drawn to the defects of the old system under which nurses were recruited for the Calcutta Hospitals, a special Committee was, in 1902, appointed to deal with the nursing arrangements in the various hospitals, and rules were framed for the guidance of the members of the Committee.

216. Various additions and improvements were made during the period to the Eden Sanitarium and Hospital at Darjeeling, the most important of which was the provision of a new Hospital Block at a cost of Rs. 20,000, which was formally opened by the Lieutenant-Governor in May 1901.

The income and expenditure of the institution and the admissions to it during the four years 1898—1901 were:—

	Income.	Expenditure.	No. of admissions.
	Rs.	Rs.	
1898	37,882	36,774	416
1899	36,800	34,398	428
1900	27,799	35,372	384
1901	37,466	36,911	548

The falling-off in income and admissions in 1900 was the result of the disastrous landslips of 1899, which deterred patients from proceeding to Darjeeling. The figures for 1901, however, show that the institution has more than regained its popularity. The greater proportion of the cases treated were cases of malaria and debility.

217. A gratifying feature in the administration of Sir John Woodburn has been the increase in the number of charitable dispensaries scattered over the Province, and their growing popularity, as shown by the figures in the margin. It is still true that each dispensary in Bengal serves on the average a larger area than in other Provinces, and that the average attendance is lower than in any other Province except Bombay, but the medical demands of the Province are to a large extent met by native practitioners, who are to be found in every town and large village, and do a great deal of free work for the poor. In this connection it is worthy of note that the outturn of qualified practitioners from the medical schools in Bengal has been in the five years ending 1901-1902 three times that of the medical schools in Bombay and the Punjab.

	No. of dispensaries.	Patients. Indoor.	Patients. Outdoor.
1898-99 ...	488	42,086	2,837,759
1899-1900 ...	513	47,897	3,243,346
1900-1901 ...	532	50,097	3,417,284
1901-1902 ...	558	49,362	3,662,477

The number of dispensaries managed by local bodies has considerably increased, the most noticeable feature in this respect being the rapid growth of institutions under the management of District Boards. A very important improvement was effected in 1899 by placing every dispensary, where possible, under a committee representative not only of the controlling local authority but also of the general public, the object in view being to interest the public in the good management of the institutions and to secure increased subscriptions. The large increase in the income of the dispensaries from Rs. 9,14,473 in 1898-99 to Rs. 12,18,993 in 1901-1902 may in some measure be attributed to this policy. Expenditure rose from Rs. 8,69,399 in1898-99 to Rs. 10,40,168 in 1901-1902.

218. Perhaps the most gratifying feature in the results of the period is the great increase in the number of female patients, who numbered 462,412 in 1898-99, 517,858 in 1899-1900, 539,563 in 1900-1901, and 587,092 in 1901-1902. This is undoubtedly the result of the measures taken in almost all the dispensaries to provide greater privacy for this class of patient. Malaria furnished by far the largest proportion of cases treated during the period, the number being in 1901-1902 as high as 953,997.

219. A new Central Lunatic Asylum is under construction at Berhampore, and the sanction of the Secretary of State was, in 1901, received to the appointment of a full-time Superintendent to be in charge of the institution. As soon as the necessary buildings are completed, it is intended to close the asylums at Dullunda, Patna, and Cuttack.

The number of lunatics in all the asylums of the Province at the end of each of the four years 1898—1901 were—

1898	946
1899	926
1900	943
1901	1,009

The proportion of criminal lunatics to the total population of the asylum continued to increase, and in 1901 it was 52·92.

SANITATION.

220. In 1898 the office of the Sanitary Commissioner was amalgamated with that of the Inspector-General of Civil Hospitals, and the Sanitary Commissioner made subordinate to the latter officer, with the additional title of Deputy Inspector-General. The chief schemes of sanitary interest that came under consideration during the period under review were the improvement of the drainage of the Chalan and Cheroil Bils, and the provision of a filtered water-supply to the riparian municipalities near Calcutta. The expenditure on Sanitary Works by the Municipalities of the Province showed a satisfactory increase. The Sanitary Board continued to do useful work as a consultative body, and numerous schemes in connection with sanitation, water-supply, and drainage were referred to it by Government and by public bodies.

VACCINATION.

221. THE deaths from small-pox in the Province during the period 1898-99 —1901-1902 were:—

1898-99	...	...	13,044
1899-1900	...	...	14,514
1900-1901	...	...	25,302
1901-1902	...	...	48,207

In 1900-1901 Calcutta and the districts of Cuttack, Puri and Palamau suffered most, and in the severe epidemic of 1901-1902 Midnapore reported no less than 13,458 deaths and Cuttack 6,291.

222. The total number of vaccinations performed fell from 2,319,536 in 1897-98 to 2,147,452 in 1898-99. This decrease was attributed to the introduction in the latter year of the six-puncture system of vaccination, which being synchronous with the inoculation plague scare in the Province appears to have at first been regarded with suspicion by the people. This mistrust of the intentions of Government soon however disappeared, for the number of operations performed rose during the three following years to 2,662,826 in 1901-1902, there being in that year an increase of 316,515 operations over the figures of the preceding year; at the same time the six-puncture system increased in popularity, both for primary and secondary vaccinations.

223. In spite of the large advance in vaccination in the Province generally in 1901-1902, the number of operations in Calcutta decreased from 43,326 in the previous year to 24,554 in 1901-1902. During the year the attention of the Commissioners was drawn to the unsatisfactory state of vaccination in the town, and the urgent need for improvement. With the object of remedying the unsatisfactory state of vaccination in the Tributary States of Chota Nagpur, an Assistant Surgeon was, in 1901-1902, appointed to supervise the work of the vaccinators, and arrangements were made for better supervision in the Political States of Seraikela and Kharsawan. In the Orissa Tributary States, with the design of making vaccination more popular, the experiment of having pupils from the various states trained in vaccination work at the Cuttack Medical School, to be subsequently employed in the states to which they belong, was tried with good prospects of success.

224. The progress of infant protection during the period was equally satisfactory; in 1901-1902 the proportion of infants successfully vaccinated was 234·59 per thousand, as compared with 156·85 in 1898-99. The variations between the proportions in the several districts continue to be very marked. In 1901-1902 more than half the infant population was protected in the districts of Darjeeling, Malda, Bhagalpur and Ranchi, while on the other hand the infant population protected in Balasore, Tippera and Bogra was below 100 per mille, and in Puri less than 27 per mille.

225. In 1898-99 the inspecting staff employed in the Province numbered 262, and the operators were 3,723. The numbers remained much the same in the following years. In 1901-1902 it was estimated that each paid vaccinator performed 1,060 operations, and each licensed vaccinator 944. Vaccination direct from the calf seems to be increasingly popular, both for primary and secondary operations.

226. The cost of vaccination was in the four years:—

			Rs.
1898-99	...	...	1,73,875
1899-1900	...	...	1,84,414
1900-1901	...	...	1,88,115
1901-1902	...	...	1,87,818

EDUCATION.

227. DURING the four-and-a-half years of Sir John Woodburn's administration, and especially during the latter portion of it, no subject received

more attention than that of education. The most prominent features in its history during the period were the falling off in the number of primary schools and pupils; the development of secondary education; the lamentably small progress made in female education; the continued backwardness of the Muhammadan population as compared with the Hindus; the increasing literacy among converts to Christianity; the revision of the system of vernacular education which was sanctioned at the beginning of 1901; the development of the scheme of training schools with the establishment of the Kurseong Victoria School; the development, especially in Calcutta, of the system of hostels or boarding-houses for students; the greater attention paid to physical exercises and drill; and the re-examination from the bottom of principles and methods of education which was initiated with the Education Conference held at Simla in 1901 and with the labours of the University Commission which began in 1902.

228. A decrease in the number of primary schools and pupils, which greatly outnumbers an increase obtained in the secondary schools, has been more or less continuous since the year 1896-97. There is a decrease in the number of schools, though not in the number of pupils, reported in 1892-93. This was made the subject of special enquiry by the Director of Public Instruction, who considered that the loss was nominal rather than real, and that it was due for the most part to elimination of weak and ephemeral schools from the returns; he however also thought that there had been some real falling-off of schools and pupils in recent years owing to financial pressure and in certain localities to agricultural distress. It is to be noted however that the Census figures show that in 1901 among persons over 15 years of age there were 146 literate males per thousand against 137 in 1891. It was the special wish of Sir John Woodburn that earnest attempts should be made to increase the number of primary schools in the villages and to give them stability, and with this object when allotting to the District Boards, to be expended on primary education, the sum of four lakhs out of the grant of ten lakhs placed at his disposal by the Government of India at the beginning of the year 1902-1903, he insisted that the Boards should devote a portion of the funds placed at their disposal to increasing the number of *pathsalas* as well as to improving the pay of the teachers in the existing schools.

229. While the primary schools have decreased in number a large increase in the number of secondary schools and pupils, the conversion of many middle vernacular schools into middle English schools, and an increase in the number of boys learning English, indicate an increasing desire among the people for higher standards of education.

230. The system of education followed in vernacular schools and in the lower classes of English secondary schools was remodelled in January 1901 in accordance with proposals submitted by a Committee of officers of the Education Department over which the Director presided. In the words of the late Lieutenant-Governor, the changes introduced "aim at developing the minds of the boys more than practising and strengthening their memories." The new system is based on Kindergarten principles and on the policy of teaching by object-lessons, which is an extension of the Kindergarten principle. In connection with this scheme the vernacular text-books in use in schools have been entirely revised.

Another important feature of the scheme is that Indian boys will in future not be allowed to commence to learn English until they have been well grounded in their own vernacular. It was accordingly decided that the child's mother-tongue should be the medium of instruction up to Class V of high schools, which corresponds to Class I of middle schools and to Standard VI of the new scheme, and which is ordinarily reached when the child is about 13 years of age. The study of English as a subject is allowed and provided for from Standard III upwards, *i.e.*, in Class VIIB of high schools and in Class IV of middle schools, this is the standard above the lower primary classes, which is reached by the average boy at ten years of age. The introduction of the new scheme necessitated the remodelling of the system of education obtaining in the Vernacular Training Schools of the Province, and proposals to this end were sanctioned in July 1901.

231. Though female education made but little progress during the period under review, it was a matter in which Sir John Woodburn took much interest. Considerable increase of public expenditure has been sanctioned, and will be devoted to schools for girls and to the payment of inspectresses of schools, and the training of female teachers is being encouraged.

232. There was a slight increase in the number of Muhammadan pupils in colleges and secondary schools and Madrassahs, but the decrease in the number of Muhammadans returned as reading in primary schools was much larger. This decrease was doubtless the result of the elimination of weak schools from the general returns noticed above, but the backwardness of the Muhammadan population in availing themselves of education continues in spite of encouragements held out to Muhammadan students by way of scholarships and special facilities offered to them for entrance into the public service.

233. The number of pupils in secondary schools increased during the period by no less than 9 per cent. There was similarly a large increase in the number of students in Arts Colleges, especially in the Law classes. The question of the enhancement of the fees payable at the Medical College, Calcutta, had been before Government for some time, and after consultation with the Inspector-General of Civil Hospitals and the Council of the College, it was decided in 1901 to substantially raise them.

234. The Sibpur Civil Engineering College and the Bihar School of Engineering continued to do useful work. The agricultural classes at the former institution established in 1898 have proved fairly successful. Ten out of twelve of the higher agricultural class and all the lower class students passed the examination in 1901-1902, and all the successful students of the first class and the majority of those of the lower class obtained appointments in Government Service, or under private gentlemen owning landed estates. The study of science in Arts Colleges advanced, and practical subjects of education were introduced in High, Middle, and Primary Schools. Drawing is now taught in almost all High schools, and elementary science subjects have been included in the curriculum of lower classes. In order to encourage and improve the hand-weaving industry of the Province, District Boards were in 1901 invited to send weavers and carpenters from their districts to learn, respectively, the use and mode of construction of the improved loom there employed. Twenty-one District Boards availed themselves of the invitation.

235. With the object of bringing under proper control pupils studying in large towns away from home and relations, rules were adopted in 1900-1901 under which students of practically all Arts Colleges, all High schools, and all Middle schools in the Province will be required, when not living with their parents or other duly recognised guardians, to live only at such hostels or messes as have been licensed or approved in writing, as a proper place for the residence of students, by some Principal of a College, or Head Master of High or Middle school.

236. During the period increased importance was attached to the physical training of pupils, and in 1899-1900 it was decided to make drill compulsory for all students in Zilla and Collegiate schools, it being left to the school authorities to exempt such students as are unfit.

237. The total net expenditure on education increased steadily from Rs. 1,11,12,906 in 1898-99 to Rs. 1,22,50,475 in 1901-1902. Of the latter amount 43 lakhs were contributed by public funds, as compared with 36 lakhs in 1892-93, and 40 lakhs in 1896-97. This increase has practically been given entirely from Provincial Revenues, and the expenditure has been mainly on secondary education and inspection, it being only since an allotment has been made in the current year from Imperial Revenues that a substantial increase of expenditure on primary schools has been sanctioned.

238. The most important changes, affecting the staff employed under the Educational Department, during the period under review, were the reorganisation of the Subordinate Educational Service in 1898, described above under 'Changes in the administration,' and the redistribution in 1901 of the inspecting staff, so as to provide for a separate Inspector of Schools for each division of the Province.

LIBRARY OF THE BOMBAY BRANCH OF THE ROYAL ASIATIC SOCIETY

132037

REFORMATORY SCHOOLS.

239. Sir John Woodburn took a keen interest in the working of the reformatory school system. In 1898 the whole subject of the management of the reformatory schools, came under consideration, including the training to be given in them, the assistance to be afforded the boys in obtaining employment and the enquiries to be made regarding their pursuits after their discharge, and in 1899 the first step in the direction of reform was taken by the transfer, with effect from the 1st January 1900, of the supervision of the schools to the Education Department in order that they might in future lose the character of prisons. A proposal to amalgamate the two schools was in 1900 temporarily abandoned, mainly on the ground that the number of inmates of the two institutions was too large. The number of admissions to the two schools in the four years 1898-99—1901-1902 averaged 110. Though this is considerably below the average of the preceding five years, when it was 135, the figures have not fallen to the extent expected from the employment of the new provisions in section 562 of the Criminal Procedure Code. Under Government orders boys of agricultural castes are concentrated as far as possible at the Hazaribagh school and boys of industrial castes at Alipore, the object of this arrangement being to secure that the boys are taught the trades, preferably those of their own caste, which will be useful to them in after-life. Efforts are being made to popularise the system under which boys are licensed out for employment in mills and workshops; and the endeavours of the Educational Department to follow up the history of the boys for three years after their release are becoming yearly more and more successful.

ARCHÆOLOGY.

240. Sir John Woodburn took a keen personal interest in the preservation of the various objects of archæological interest which are scattered over the province, and lost no opportunity of visiting them and seeing for himself that where restoration or repair was necessary it was satisfactorily carried out. Outside Calcutta the temples of Bhubaneshwar and the Muhammadan ruins at Pandua and Gaur received most attention; but restoration work was also executed in connection with the palace and fort at Rhotas, the old fort at Monghyr, and Sher Shah's tomb at Sasaram.

241. At Bhubaneshwar, the great Lingaraj and other selected temples were judiciously repaired. At Gaur measures were taken for the preservation of the Lattan mosque, the Bara-durwaza, the Tantipara mosque, and the Dakhil gate of the old fort; and at Pandua the Eklakhi mosque and the Sona musjid received attention. Restoration of portions of the great Adina mosque at the same place was also commenced.

242. In Calcutta that portion of the site of the Black Hole which has not been built upon, and which lies between the Collectorate and Post Office buildings, was paved with polished black marble and enclosed with an ornamental iron railing. Slabs indicating the site have been inserted in the two adjacent buildings at places where they will be easily seen by the passer-by. Similarly the limits of the old Fort of 1756 were outlined in brass let into stone blocks and white marble tablets have been placed in conspicuous places with inscriptions showing the sites of the various buildings of which it was composed.

243. A new post, that of Archæological Surveyor, Bengal Circle, was created in 1900, the appointment being conferred on Dr. T. Bloch of the Indian Museum.

CENSUS.

244. The fourth decennial Census of Bengal was held on the night of the 1st March 1901—the date fixed for the general Census of the Indian Empire. Mr. E. A. Gait, C.S., was the Provincial Superintendent.

Apart from the improvements in organisation and in execution which are noticed at each successive Census the special feature of the Census of 1902

was the introduction of a new method of tabulating results. At previous Censuses for the compilation of the results, the information contained in the schedules was extracted on abstraction sheets by the tick system. On the present occasion this method was abandoned in favour of the "slip" system, which is simpler, and in other respects much better. The work was carried out at six central offices instead of at the head-quarters of each district as in 1891, the District Officers being thus spared the additional work thrown upon them at the last Census.

The last of the 18 tables prepared was completed by the beginning of June, and the Census Report was issued four months later. The total expenditure of all kinds amounted to less than Rs. 3,90,000, or under Rs. 5 per thousand of the population, as compared with Rs. 7,00,000, or rather more than Rs. 9-7 per 1,000 in 1891. The large reduction in cost was due, to a great extent, to the introduction of the slip system; but considerable savings were also effected in other directions—by improved record-room arrangements, by the employment of men on lower pay, and by strict economy at all points.

245. The total population of the Province, including Hill Tippera and Cooch Behar and the Tributary States of Chota Nagpur and Orissa, as finally ascertained, was 78,493,410 as against 74,673,798 in 1891. Males numbered 39,278,186 and females 39,215,224, the corresponding figures at the preceding census being 37,252,375 and 37,421,423. The results show a large increase in Eastern Bengal and all the Native States except Cooch Behar, a moderate increase in the rest of Bengal and in Orissa and Chota Nagpur, and a slight decrease in Bihar. The net result in the Province is a gain of about 5 per cent. as against 7 per cent. in the previous decade. Of the total population, 49,687,362 are Hindus, 25,495,416 Muhammadans, 2,780,468 Animists, and 278,366 Christians.

246. The actual numerical increase since 1891 was much the same for both Hindus and Muhammadans, but compared with their previous strength the latter increased by nearly 8 per cent. while the Hindus gained only 4 per cent. This result is attributed by Mr. Gait partly to conversions from Hinduism to Muhammadanism and to the fact that the most progressive part of the Province is that occupied by Muhammadans, while Bihar, the stronghold of Hinduism, has returned a smaller population than in 1891, but to a larger extent to the fact of the Muhammadans' greater prolificness. Hinduism though it lost converts to Muhammadanism, in turn gained recruits from the animistic tribes, the Santals, Mundas, Oraons, and other so-called aborigines. These tribes are amongst the most prolific in the Province, and yet the census showed that the strength of the animistic religions had increased by only 1 per cent. Mr. Gait considers that the true increase was probably more nearly 11 per cent., the natural growth being counterbalanced by conversions to Christianity and Hinduism. Christianity took some 60,000 off these tribes during the decade, and about 200,000, entered the fold of Hinduism. Christians showed an increase of 44·6 per cent. over the figures of 1891, the result chiefly of the rapid growth of Christianity in the Ranchi district of Chota Nagpur, where missionary effort is particularly active, the district returning 124,958 Christians as against 75,693 ten years before. Of the total number nearly 10 per cent. were returned as belonging to European and allied races, 8·3 per cent. were returned as Eurasians, and the remainder as native converts. The Protestant faith claimed 165,540 and the Roman Catholic 108,914. Of the Protestants, 57,810 belonged to the Anglican communion, 69,580 were Lutherans, 21,621 were Baptists, and 7,152 were Presbyterians. Of the other religions the most important is Buddhism, which returned 237,983 adherents against 194,717 in 1891. The increase was due largely to the enumeration by religion of Sikkim; but there was also a considerable increase in the Chittagong Hill Tracts, Chittagong, Darjeeling and Jalpaiguri, Hill Tippera, Backergunge, and Calcutta.

247. The number of Europeans in the Province increased from 22,773 in 1891 to 27,489 in 1901, and the number of Eurasians from 15,162 to 23,114. The Superintendent considers this return to be more accurate than that of the last census, when the Eurasians amounted to only 39 per cent. of the combined population of the two races compared with 46 per cent. on the present occasion. About half of the Europeans and nearly two-thirds of the Eurasians were

enumerated in Calcutta. Amongst the Europeans the males aged 15 and over are more than twice the number of the females.

248. As in former censuses the age returns were probably the least trustworthy of all the statistics collected. The inaccuracy is attributed to ignorance, to a preference for certain numbers and in a lesser degree to wilful mis-statements. Assuming the degree of error to be fairly constant, Mr. Gait, by a comparison of the figures for successive censuses, deduced the conclusions that the mean age of the population which fell slightly in 1891 has again risen to a somewhat higher figure than in 1881 ; that the higher castes live longer than the aboriginal tribes, while the latter have larger families than any other section of the community ; that though there is little difference between the relative longevity of Hindus and Muhammadans, the latter are more prolific than the Hindus and are consequently increasing more rapidly ; and lastly that the birth-rate is gradually declining owing, it would seem, to the deliberate avoidance of child-bearing amongst certain sections of the community. The actual population showed a slight deficiency of females, who number only 998 to every 1,000 males ; but if the effects of migration be discounted by considering only the natural population, *i.e.*, the persons born in the Province, it appears that the females exceed the males in the ratio of 1,003 to 1,000. Females are in marked excess in Bihar and Orissa and to a less extent in West Bengal and the Chota Nagpur Plateau. East of the Bhagirathi, where the Mongoloid element bulks more largely in the population, they are in a considerable minority. There has been a steady decline in the proportion of females since 1881, due to the fact that the most progressive tracts are, generally speaking, those where males predominate, while many of the districts with the largest proportion of the other sex are stationary and decadent.

249. The most striking fact brought out by the statistics of marriage is the universality of this institution. The number of persons, other than those suffering from some bodily or mental affliction who go through life unmarried, is extremely small. About half the total number of males enumerated were returned as unmarried, but of these four-fifths were under 15 years of age. Only one-third of the female population is unmarried, and of these only 4 per cent. were over 15 years of age. The proportion of the widowed is about 1 in 25 in the case of males, but amongst females nearly 1 in every 5 is a widow.

250. In the Province as a whole the age at marriage is gradually rising, while the proportion of the widowed is diminishing. The former circumstance is due, in part at least, to a genuine change in the customs of the people. In Darbhanga and the neighbourhood infant-marriage is as prevalent as ever, but elsewhere the tendency is to postpone the age at which girls are given in wedlock. The decline in the number of widows is due partly to the fact that the Muhammadans, Animistic tribes, and low Hindu castes who permit their widows to marry again are increasing more rapidly than the section of the community that forbids them to do so, and partly to the effect of the preaching of the Maulvis amongst the Muhammadans and to the gradual disappearance of the old Hindu prejudices against widow-marriage.

251 Excluding immigrants the languages spoken in Bengal belong to one or other of four linguistic families—Aryan, Dravidian, Munda or Kolarian, and Tibeto-Burman. Of these the languages of the Aryan family are by far the most important, and are spoken by no less than 95 per cent. of the total population. The Munda family comes next, but its speakers represent only $3\frac{1}{2}$ per cent. of the total, while the other two families each claim less than 1 per cent. The main Aryan languages of Bengal are Bengali, Bihári, Eastern Hindi, and Oriyá. The census did not distinguish Bihári from Hindi: both are included in "Hindi." On the average, out of every 1,000 persons in the Province 528 speak Bengali, 341 Hindi, including Bihári, 79 Oriyá and 1 Khas, leaving only 51 persons per 1,000 for all the other languages put together.

Aryan	family ...	74,518,085
Munda	,, ...	2,781,211
Dravidian	,, ...	683,732
Tibeto-Burman	,, ...	450,591
Total	...	78,433,619

252. The infirmities recorded at the census as on former occasions were insanity, deaf-mutism, blindness, and leprosy. The number of persons afflicted with these infirmities shows a progressive decline due, as is believed, in the main to more accurate enumeration and more careful exclusion of persons

whose infirmities, whatever they might be, did not fall within the scope of the sanctioned definition.

253. The only test of literacy was the ability to read and write any language. People of whatever age who could do this were entered as literate and those who could not as illiterate. The qualification seems a very simple one, but even so only one male in 10 and one female in 200 were able to satisfy it. For every female who can read and write there are 20 males. The proportion of literate persons is highest in Orissa and Bengal Proper and lowest in Chota Nagpur. In the two tracts first-mentioned there is a larger proportion of literate persons than in any other Province in India. During the last decade the number of literate males shows a moderate increase of 11 per cent., while that of females has risen by 63 per cent. There appears to have been a considerable increase in the number of English-knowing persons among the native population of the Province since 1891.

254. The most striking feature of the return of occupation is the large proportion of the population who are dependent on agriculture. Nearly two-thirds of the people are either landlords or tenants; six per cent. have been returned as agricultural labourers, and of the seven per cent. shown as general labourers, the great majority must also be mainly dependent on agriculture. About twelve per cent. of the total population (including dependents) are engaged in the preparation and supply of material substances, and of these half find a livelihood by the provision of food and drink, and a fifth by making and dealing in the textile fabrics and dress. Domestic and sanitary services provide employment for very few, and the number of persons who subsist by this means is barely two per cent. of the population, or less than a third of the proportion so employed in England and Wales. Commerce, transport and storage provide employment for two persons in every hundred, of whom rather more than half are engaged on transport and storage and slightly less than half on commerce. Including Brahman priests, the professions are the means of subsistence of less than two persons per cent.

255. Of the castes other than Muhammadan there are fifteen having more than a million members, viz. (in order of numbers) the Ahirs, (or Goalas), Brahmans, Kaibartas, Rajbansis (or Koches), Namasudras (Chandals), Santals, Chamars (Muchis), Rajputs, Kurmis, Telis, Kayasthas, Koiris, Dosadhs, Babhans and Bagdis. The Ahirs who are nearly four millions are a long way the most numerous; next follow the Brahmans with nearly three millions, the Kaibartas who are nearly two and-a-half millions, the Rajbansis with over two millions, the Namasudras and the Santals each with over eighteen hundred thousand; the Chamars with sixteen hundred and twenty-six thousand; while the other eight castes named are each between a million and a million and-a-half strong.

256. That Bengal like the rest of India is a land of villages and not towns has long been known, and it appears that at the present time out of every 100 persons in the Province, 95 live in villages and 5 in towns. In the statistics for towns the most striking features are the increase in the population of Calcutta and Howrah and their suburbs, and the decrease in the towns of Bihar, which was due to plague mortality and to temporary desertion caused by the fear of plague.

257. The great and growing immigration to Bengal Proper from Bihar and the United Provinces, the emigration from Chota Nagpur to the Assam tea gardens and from the Sonthal Parganas to the Barind tract of Northern Bengal are the most noticeable features of the "migration" statistics. The immigrants from Bihar and the United Provinces come to work in the mines of the coal area, and in the mills of the Metropolitan districts, while in the districts of Bengal proper they are generally employed as field labourers, on earth work, on railways, roads and tanks: in the towns (and especially in Calcutta, where 40 per cent. of the inhabitants are Hindi-speaking), they are mostly day-labourers, servants and palki-bearers. Chota Nagpur, though the most sparsely populated tract of the Province, sends out not only the greatest number of emigrants, but also the largest proportion as compared with its population; next to Chota Nagpur the districts of Bankura, Hooghly, and Saran send out the greatest proportion of emigrants. More than 10 per cent. of the persons born in these districts were enumerated away from their homes.

258. Examining the totals according to the administrative divisions of the Province, Chittagong shows an increase of 13 per cent., Dacca 9½ per cent., Orissa and Burdwan 7 per cent., Chota Nagpur and Rajshahi 6 per cent., the Presidency Division 5 per cent., and Bhagalpur 1½ per cent. The Patna Division returns a decrease of 2 per cent., the result of short crops in three years of the decade, and of general unhealthiness, especially in 1900, when plague broke out in an epidemic form and accounted for 50,000 deaths. Similar conditions, though in a lesser degree, were responsible for the comparatively small increase in the Bhagalpur Division. The Native States show an increase of 12½ per cent., due to some extent to better enumeration.

259. The arrangements made for taking the census in Calcutta, where the Deputy Chairman of the Corporation was appointed Superintendent, were much the same as in the rest of the Province. A new departure was made by employing an unpaid enumerating agency. At previous censuses enumerators in Calcutta were always paid for their work, and some opposition to the experiment was at first experienced, but soon disappeared.

260. The population of Calcutta, with the Port, Fort, Canals, and three Suburban Municipalities of Cossipore-Chitpur, Manicktollah, and Garden Reach, has increased as shown in the margin. The increase in 30 years is thus 35 per cent., and in the last decennial period 24 per cent. The increase in the old town area of 18 wards was 6·6 per cent. at the census of 1881, 9 per cent. at that of 1891, and 24 per cent. at that of 1901. The average density of the population has increased from 54 in 1891 to 68 in 1901 per acre for the whole town; but in the Colootollah ward there are 281 persons to the acre, and in Jorasanko and Jorabagan over 200.

1872	...	...	704,750
1881	...	...	684,658
1891	...	...	765,510
1901	...	...	949,144

261. Of the total population of Calcutta, 615,491 are Hindus, 286,576 Muhammadans, and 38,515 Christians. Hindus have increased by 28 per cent., Muhammadans by 21 per cent., and Christians by 27 per cent. Two-thirds of the population are male and one-third female, the proportion at the last census being 64·8 and 36·2. The educational statistics show that 752 per mille of the population are still illiterate; of every 248 literates, 209 are male. The ratio of male to female literates in the different religions is amongst Christians 21: 13, amongst Muhammadans 168: 13, and amongst Hindus 91: 13. Bengal is shown as the birthplace of 798,289 persons, the United Provinces of 106,413, Rajputana of 14,964, while 6,872 are reported as born in the countries of Europe. Fifty-nine languages are spoken in Calcutta. Bengali, which of course predominates, is spoken by nearly five lakhs of people, but more than 3½ lakhs speak Hindustani: next in numbers at a long interval come the speakers of Uriya and English.

CONCLUSION.

262. When Sir Alexander Mackenzie laid down, in April 1898, the office of Lieutenant-Governor of Bengal, he was succeeded by Sir John Woodburn, who was at that time a Member of the Council of the Governor-General. The new Lieutenant-Governor had no acquaintance with Bengal, for the greater part of his service had been spent in the Province of Oudh, but he was equipped for his new task by the possession of many qualities which go to make up the successful administrator,—industry, prudence, courage, firmness, a high sense of duty, and an unfailing courtesy and consideration for others: to these natural gifts he had added long training, both in district work and in the Secretariat, and experience of men and affairs gained in two Provinces and in the direct employent of the Government of India.

263. The commencement of Sir John Woodburn's tenure of office coincided with the currency of a new Financial Settlement with the Government of India, and he succeeded to a depleted treasury exhausted by the efforts of the Government to meet the Bihar famine of 1896-97, to repair the damages of the earthquake of June 1897, and to protect the Province against the expected invasion of plague. But after the first year of his tenure of office, the Lieutenant-Governor was no longer hampered by straitened circumstances, and he

was able to carry out, with ever-increasing resources the many, measures, beneficial and protective, which experience and necessity combined to press upon his attention.

264. One of the circumstances which was synchronous with the administration of Sir John Woodburn, was a great development of the City and port of Calcutta; and one of the first subjects which demanded his attention, was legislation in respect of the municipal constitution of the capital city of Bengal. Owing very largely to the development of the trade of the Province, Calcutta, during the period of the late Lieutenant-Governor's administration, advanced with extraordinary rapidity in wealth, population, and importance. During the decade between 1891 and 1901 the number of its inhabitants increased by 24 per cent., and the density of population per acre, rose from 54 to 68. The Calcutta Municipal Act, passed in the second year of Sir John Woodburn's Lieutenant-Governorship, swept away a constitution, which had been found inefficient, and substituted another, which, if it can be judged by the result of a two years' trial, has amply justified its existence: the valuation of the city has increased by 14 lakhs, its credit stands high, and it is about to enter upon a great scheme for its improvement and development.

265. Similarly the Port Trust of Calcutta, after a long period of comparative depression culminating in an enquiry by a Commission appointed for the purpose, passed, during the time of Sir John Woodburn, to a position of great prosperity: large sums have been borrowed and profitably expended in schemes of far-reaching benefit and utility. The expenditure of the Port Trust increased from 65¼ lakhs in 1898-99 to nearly 74 lakhs in 1901-1902, and in that year the receipts amounted to 75¾ lakhs—the highest on record. In all these matters and in the material development of the City and Port, in every way, the Lieutenant-Governor took a keen personal interest.

266. But the advance and development of Calcutta formed after all but a small part of the matters which were dealt with in the administration of Sir John Woodburn. Prominent among the large questions which presented themselves for disposal, were the reform of the police and the development of education in Bengal. From the time that he was a District Officer, the late Lieutenant-Governor had always taken a special interest in the working of the police, and some time before the Government of India took up the question of police reform, and appointed the Police Commission of 1902, Sir John Woodburn had instituted detailed enquiries into every part of the complicated machine which exists in Bengal, and had formulated proposals which, it is believed, will be found to have anticipated many of the recommendations of the Imperial Commission. Especially did he labour to raise the status and increase the efficiency of the village watch, to lighten the burdens of the regular police, by relieving them from the conduct of unnecessary and fruitless investigations, and to improve the position and prospects of the investigating and inspecting agencies.

267. With regard to education, sustained efforts were made to restore the numbers and improve the efficiency of primary schools and their pupils, in regard to both of which matters there had been a steady deterioration for some years, and out of the 10 lakhs granted in 1902, by the Government of India for the development of education in Bengal, 4 lakhs were allotted by the Lieutenant-Governor for primary schools. In 1900 the whole scheme of vernacular education was brought under review, and an entirely new system was introduced with effect from the following year; secondary education was fostered, and technical and training schools were encouraged. Endeavours were made, especially in Calcutta, to establish hostels and boarding-houses for students, and under the auspices of the Lieutenant-Governor, the Government of Bengal entered heartily into the extensive examination into the question of education in India which was inaugurated by the Educational Conference at Simla in 1901, and has been continued by the labours of the Universities Commission. During the four completed years of Sir John Woodburn's administration, the nett sum expended annually on education, in Bengal, increased by 13 lakhs, without including the grant of 10 lakhs which was received from the Government of India in the year of his death.

268. The improvement of the position of the various Government services also received the considerate attention of the Lieutenant-Governor. The

Subordinate Educational Service was entirely reorganised in 1898, and in 1901 the inspecting staff, of the Education Department, was so redistributed as to provide a separate Inspector of Schools for each Division in the Province. The Provincial Executive Service was reorganised in 1899, by increasing the numbers and by readjusting the grades so as to ensure a reasonably rapid flow of promotion. Later on the sister service, the Provincial Judicial Service, was reorganised by regrading the Munsifs, and by the addition of a number of Subordinate Judges, while in 1902 a scheme was submitted to the Government of India for increasing and reorganising the Subordinate Executive Service, which is still under consideration. Lastly, in 1901, the position and prospects of the Civil Hospital Assistants were greatly improved, by the introduction of a superior grade, and by a reduction of the period of service in each grade.

269. Steady progress was made by the Department of Public Works in all directions, and the annual expenditure, under the heads of Roads and Buildings, advanced from 44 lakhs in 1898-99 to 71½ lakhs in 1901-1902. The courts and offices of Government were improved wherever improvement was found necessary, and in particular a large number of courts and residences were constructed for Munsifs in outlying parts of the Province. In Calcutta, the new General Hospital, commenced by Sir Alexander Mackenzie, was completed, and other important hospitals and asylums were built. The damage done by the cyclonic storm, in Darjeeling and its neighbourhood, was repaired at a total cost of nearly 20½ lakhs of rupees. The question of feeder roads to the railways was also taken up. Much attention was paid to the development and improvement of the great waterways of Bengal, particularly the deepening of the *bil* route in the Faridpur district, and the dredging of the Bhagirathi river. During the four years of Sir John Woodburn's administration, the length of railways in Bengal was increased by 1,064 miles, mostly contributed by the Bengal-Nagpur Railway. A notable incident, in connection with railway administration, was the appointment of a Committee to consider the large question of a Central Station for Calcutta. Their conclusions, announced in 1901, were on the whole adverse to the proposal, and with the concurrence of the Government of India, the matter was allowed to drop. Other important railway questions, which were dealt with, referred to the access of the Bengal-Nagpur Railway to the Jherria coal-field, to the congestion of traffic on the East Indian Railway, and to the construction of alternative lines to connect Calcutta with the Upper Provinces and Northern India. In irrigation matters the most important work of Sir John Woodburn's time was the commencement of the Tribeni Canal in Champaran, 60 miles in length, which is designed, at an estimated cost of 38 lakhs, to fertilise and protect from famine an area of 114,000 acres: the Dhaka Canal, a smaller project in the same district, is estimated to cost 3 lakhs. Important measures were also undertaken in connection with the numerous embankments in the Province.

270. Sir John Woodburn was fortunate in that the four-and-a-half years of his tenure of office were years of agricultural prosperity, so that the shadow of famine never fell upon Bengal in his time. Twice only—and then only in parts of the Province—was the prospect clouded, viz., once in the summer of 1900, when some little relief had to be given in the Chota Nagpur Division, and again at the end of 1901, when the short rainfall in Bihar suggested the approach of scarcity. The crisis passed, however, without necessitating any relief operations.

271. During the same period the natural products of the Province, both vegetable and mineral, attracted much of the attention of the Lieutenant-Governor. The indigo industry, which had for some time been threatened by the competition of the artificial dye, continued its downward career, which was accelerated by a series of bad seasons, so that both the area under cultivation and the outturn reached their lowest known limit in 1901-1902. With the object of arresting the decay of the industry, the consequent loss of a very large invested capital, and the impoverishment of a host of labourers, the Lieutenant-Governor contributed liberally from provincial funds towards a research fund, which was started by the indigo-planters themselves, in order to discover, if possible, better methods both of growing the plant and of extracting the dye. Tea similarly was threatened with failure, and the

Lieutenant-Governor in like fashion sanctioned a grant from provincial funds towards the cost of a botanist who was employed to investigate the natural history of the tea plant. Nor was Sericulture, which is an important industry in Central Bengal, overlooked. In 1898-99, the control of Sericultural operations was made over to an independent Committee appointed for the purpose, and they were aided by a subvention of Rs. 3,000 a year which has since been doubled. A Sericultural school has been established at Rampur Boalia, which has done useful work.

272. While the industries above mentioned have suffered, or been threatened with decay others flourished exceedingly during the administration of Sir John Woodburn. Jute is the great manufacturing staple of Northern and Eastern Bengal, and in 1901-1902 nearly 21 million maunds were exported, valued at 12¼ crores of rupees. The cultivation of sugar also, which at one time showed a falling off, is likely to be largely extended in Bihar in place of indigo. Impressed with the possibility of this substitution, the late Lieutenant-Governor appointed a Committee in October 1900, under the presidency of Mr. J. E. O'Conor, to consider the whole subject. Their report has given a stimulus to the cultivation of cane and the manufacture of sugar.

273. The above paragraphs deal with the chief vegetable products of the Province, but in respect of two at least of the mineral products, of Bengal, great strides were made during the administration of Sir John Woodburn. Of these the coal trade of Bengal is by far the most important. The output increased from 3½ million tons in 1898-99 to 5½ million in 1901-1902, and the Lieutenant-Governor was quick to notice and to aid this growing industry. An Act for the regulation and inspection of mines was passed by the Imperial Legislative Council in 1901, and upon that a Mining Board was formed in the same year; special grants were given for the improvement of communications in the coal area; arrangements were made for the access of the Bengal-Nagpur Railway to the Jherria coal field, and a scheme was launched for a reorganization of district boundaries, so as to comprise most of the coal bearing area in one administrative district. Similarly the mica industry, which had become almost extinct, underwent great developments, and the year 1902 witnessed the unprecedented output of 870 tons of this commodity. Revised rules for prospecting licenses and for mining leases were issued in April 1902.

274. Other objects of the solicitude of Sir John Woodburn were medical relief, jails and reformatories, and the labour question. Reference has already been made to the completion of the General Hospital in Calcutta, and to the erection or enlargement of the medical institutions in and near the metropolis. In addition to these measures, a hospital block, at a cost of Rs. 20,000 was added to the Eden Sanitarium at Darjeeling, a Committee was organized in Calcutta to deal with the Nursing arragements in all the Calcutta hospitals, and many improvements were carried out in mufassal hospitals and dispensaries, especially in the direction of securing more privacy and better accommodation for female patients. In the Jail Department special attention was paid to the health of the prisoners and to the working of the mark system, but on the other hand, steps were taken to make certain that tasks are properly enforced and that hard labour in prisons is made a reality. The control of Reformatories was transferred from the Jail Department to that of Education, and the Lieutenant-Governor took great presonal interest in the subject.

275. As regards the labour question, the laws regulating both Colonial and Inland Emigration were amended by the Government of India, during the period under review, and many questions in connection with the latter Act (VI of 1901) came before the Lieutenant-Governor both before and after the passing of the Act.

276. From a revenue point of view, Sir John Woodburn's administration will always be remembered as one, during which great progress was made in the work of survey and settlement. During his time the long and onerous task of settling Orissa was brought to a very successful conclusion, as were the settlements of Chittagong, Champaran, Muzaffarpur and Saran, and several others of private estates. At the end of the period important operations were in progress in several districts, and a far-reaching programme had been prepared. The question of maintaining the record in districts where there had been a

survey and settlement was fully discussed with the Government of India, and a beginning was made with the starting of Agricultural Banks.

277. Sir John Woodburn had strong artistic and archæological tastes, and by his orders and under his personal directions much was done to preserve and restore some of the historic ruins of Bengal. He will ever be remembered for his work in rescuing Gaur and Pandua from oblivion; for his restorations of Rhotasgarh and of the ancient Hindu temples of Orissa, at Bhubaneshwar and Kanarak.

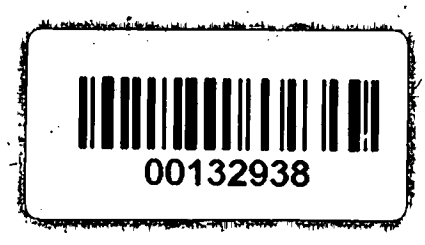
278. The one great calamity, which overshadowed the administration of Sir John Woodburn, was the presence of plague in the Province. But the calamity served to bring into relief the best qualities of the administrator who had to deal with the crisis, and his conduct of the operations to prevent the spread of the disease earned for him the admiration and affection of the people. Sir John Woodburn, as member of Council in the Home Department, had had ample experience of operations against plague in other provinces of India, and he came to Bengal inspired with the conviction, that the employment of force was worse than useless, and that no measures could be successful unless they were carried out with the consent and co-operation of the public. He had not been long in the Province before these principles were put to the test. In April 1898, before Sir John Woodburn had been a fortnight at Belvedere, plague broke out in Calcutta, and in spite of the efforts of Government to reassure the people, a violent panic ensued, and serious disturbances took place. The epidemic died out in October with a total of 189 deaths. Plague reappeared in Calcutta in 1899, from January to March, but, guided by the experience of the previous year, the Government forbade compulsory removal to a hospital, and while inoculation was left optional, much reliance was placed upon disinfection, which was extended both in scope and efficacy. To prevent the diffusion of the disease from Calcutta to mufassal districts, and especially to other provinces, inspection stations and camps were formed upon the railway at four points, besides the two termini in Calcutta. In the mufassal, which was only slightly infected, evacuation of infected houses was resorted to.

279. The second year of the plague in Bengal was 1899-1900. It reappeared with much greater violence than before in Calcutta, and obtained a firm hold over Bihar. In Calcutta, the operations aroused no opposition, but in several instances they were resisted in Bihar, and these incidents led to a Conference on the matter between the Lieutenant-Governor and some of his officers. In the event, the policy of conciliation was re-affirmed and the use of force forbidden. Later on these views were accepted by the Indian Plague Commission: they were adopted by the Government of India, and have since been the basis of all measures for dealing with plague. The third year of the epidemic (1900-1901) was marked by serious increase of plague mortality throughout the Province, the recorded deaths rising from 23,551 to 72,341. The localities affected were the same as before, and there was little or no grave disturbance. During 1901-1902, the fourth year since the appearance of the epidemic in Bengal, its virulence was considerably abated, and the number of reported deaths fell to 38,287. As before, Calcutta and the districts of the Patna Division were the localities most severely affected. In Calcutta, disinfection was practised without opposition, but in the mufassal the operation was still regarded with suspicion, and evacuation was the one preventive measure generally accepted by the people. No disturbances occurred anywhere.

280. Such, in few words, were the leading features of Sir John Woodburn's tenure of the office of Lieutenant-Governor of Bengal. His administration was such as might have been expected of a man of his character and attainments. It was eminently sound, practical, and beneficent; and when at last he fell at his post, a victim to duty and self-devotion, he could look back upon a period which, if it included no great and far-reaching reforms, and no brilliant feats of statesmanship, was marked by steady progress and prosperity—clouded only by the presence of plague—and a series of wise and useful measures carried out in almost every branch of the Administration.

281. The news of his death was received with sincere and universal grief and lamentation, for no Lieutenant-Governor of Bengal had ever succeeded in gaining more widespread popularity and esteem among every class of the community than did Sir John Woodburn.

B. S. Press—4305J—670—19-6-1903—L. N. & others.


00132938

Digitized with financial assistance from

Government of Maharashtra

on 01 February, 2020